

**The Public's Perceptions of Individual's with Autism Spectrum Condition in the  
Criminal Justice System**

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**Msc. Family & Child Psychology**

**PS7112 – Research Dissertation**

**2016/2017**

**The University of Chester**

# **The Public's Perceptions of Individual's with Autism Spectrum Condition in the Criminal Justice System**

Word Count: 14,114

## **Declaration**

This work is original and has not been submitted in relation to any other degree or qualification.

**Signed:**

**Date:**

## **Acknowledgements**

I would like to take this opportunity to thank Dr. Michelle Mattison for supporting and supervising me throughout the dissertation process, and for teaching me that no question is a stupid one.

Thank you.





University of  
Chester

## Department of Psychology

### Research Module Meeting Log 2016/2017

NAME: Elizabeth Annie Taylor-Diparno

SUPERVISOR: Dr Michelle Mattison

Date	Discussion Topics
18.01.17	<ul style="list-style-type: none"> <li>- Discussion had in regards to the dissertation topic, and options in regards to the type of study</li> <li>- Agreement on creating a differing study to the one advised in the dissertation handbook</li> <li>- Content of the ethics application discussed</li> <li>- Agreement that the supervisee would complete the below by the next tutorial:               <ul style="list-style-type: none"> <li>• Take part in 2 other studies concerning a similar topic</li> <li>• Complete question 6 on ethics application</li> <li>• Research questionnaires which have been used to examine similar issues</li> <li>• Complete consent and debrief sheets needed for ethics application</li> </ul> </li> </ul>
01.02.17	<ul style="list-style-type: none"> <li>- Further content of ethics application was discussed</li> <li>- Discussion around SATA questionnaire and other questionnaires examining similar topic (Mark Kebbell, Lucy Henry)</li> <li>- Information sheet and Debrief sheet discussed</li> <li>- Agreement that the supervisee would complete the below by the next tutorial:               <ul style="list-style-type: none"> <li>• Email supervisor journal articles which contain the scales that will be adapted for this study</li> </ul> </li> </ul>

- Continue to complete ethics application
- 22.02.17
  - Further Discussion in regards to completed sections of ethics application
  - Discussion and an agreement made in regards to the adapted questionnaires that will be used for this study
  - Agreement that the supervisee would complete the below by the next tutorial:
    - Email supervisor in regards to the transcripts being used for the study
    - Complete ethics form and email it to supervisor
- 08.03.17
  - Discussion around completed Ethics application and final amendments
  - Discussion around forward plan of dissertation
  - Agreement that the supervisee would complete the below by the next tutorial:
    - Submit ethics application by 10.03.17
    - Sign up to Bristol Online Surveys and learn how to use it
    - Carry out a literature review to identify sources for dissertation introduction
- 05.04.17
  - Discussion around ethics form being returned
  - Discussion around 6 items on ethics form that needed amending
  - Discussion around completion of ethics amendment form
  - Discussion around identified literature for introduction
  - Agreement that the supervisee would complete the below by the next tutorial:
    - Complete ethics amendment form and submit on 26<sup>th</sup> April
    - Continue to work on introduction
- 26.04.17
  - Ethics amendment form signed off by supervisor and then submitted
- 17.05.17
  - Discussion around the two scales used as part of the study
  - Discussion around other information the questionnaire would be collecting
  - Agreement that the supervisee would complete the below by the next tutorial:
    - Complete survey on Bristol Online Surveys and send to supervisor

- Enable the survey to go live, and start recruitment once ethics amendment form is approved
- 31.05.17
  - Discussion in regards to timeline of completion of certain areas of dissertation
  - Agreement that full draft would be completed by the 11<sup>th</sup> September 2017
  - Agreement that analysis will start on 26<sup>th</sup> July if not before
  - Discussion around methods section
  - Agreement that the supervisee would complete the below by the next tutorial:
    - Complete draft of methods section
- 21.06.17
  - Discussion around methods section
  - Discussion around number of participants who have completed study so far
  - Agreement that the supervisee would complete the below by the next tutorial:
    - Complete introduction draft
- 19.07.17
  - Data retrieved from Bristol Online Surveys
  - Discussion around items needing to be recoded and calculated before being able to move on to next stage
  - Agreement that high scores would represent a positive view of ASC and a low score would identify a negative perspective
  - Agreement that the supervisee would complete the below by the next tutorial:
    - Identified data that will require recoding and recode it
    - Calculated scores on necessary questions
    - Start inputting information into SPSS
- 26.07.17
  - Discussion around what further tests would need to be ran on the data
  - Agreement that the supervisee would complete the below by the next tutorial:
    - Complete ANOVA's on all credibility characteristics
    - Start results section
    - Complete reading on repeated measures

- 02.08.17
- Discussion around ANOVA and post hoc tests needing to be completed
  - Agreement that the supervisee would complete the below by the next tutorial:
    - Complete post hoc tests applying Bonferroni correction
    - Finish results section type up
    - Agreement made that full draft would be completed by 6<sup>th</sup> September
- 09.08.17
- Discussion around correlation
  - Agreement that the supervisee would complete the below by the next tutorial:
    - Complete correlation tests and input into results section
    - Complete draft by 6<sup>th</sup> September
- 07.09.17
- Discussion around feedback in relation to draft dissertation
  - Agreement that the supervisee would complete the below by the next tutorial:
    - Complete discussed amendments by 20<sup>th</sup> September
- 20.09.17
- Final signatures were provided

SIGNED

STUDENT \_\_\_\_\_ DATE: \_\_\_\_\_

SUPERVISOR \_\_\_\_\_ DATE: \_\_\_\_\_

# Table of Contents

Title page and word count	2
Declaration	3
Acknowledgements	4
Supervision log	5
Table of content	9
List of tables	11
 <b>1. Abstract</b>	 12
<b>2. Introduction</b>	13
2.1. Stigmatisation and Exclusion of Individuals with Autism Spectrum Condition	14
2.2. Autism Spectrum Condition within Society	15
2.3. Vulnerable Witnesses within the Criminal Justice System in England and Wales	20
2.4. Juror's Perceptions of Vulnerable Witnesses	26
<b>3. Method</b>	30
3.1. Participants	30
3.2. Measures and Stimuli	30
3.2.1. Societal Attitudes towards Autism Scale	30
3.2.2. Transcripts	31
3.2.3. Characteristics of Credibility Questionnaire	32
3.3. Procedure	33
3.4. Design and Analysis	35
<b>4. Results</b>	36
4.1. Capability	37
4.2. Truthfulness	38
4.3. Confidence	39
4.4. Credibility	41
4.5. Competency	42
4.6. Accuracy	43
4.7. Believability	44
4.8. Honesty	45
<b>5. Discussion</b>	47
5.1. Findings	47
5.2. Developmental Status and Disclosure	47
5.3. Interaction of developmental status and disclosure	53
5.4. Societal Attitudes towards Autism scale and the disclosure status of ASC	59
5.5. Limitations	61
<b>6. Conclusion</b>	64

<b>7. References</b>	<b>65</b>
<b>8. Appendices</b>	<b>85</b>
Appendix A: Societal Attitudes towards Autism Scale	85
Appendix B: Transcripts (4)	87
Appendix C: Eight Characteristics of Credibility	104
Appendix D: Participant advertisement Facebook post	105
Appendix E: Information Sheet	106
Appendix F: Debrief Sheet	109
Appendix G: Ethics Application	110
Appendix H: Ethics Amendment Form	169
Appendix I: SPSS Outputs – CD attached to rear cover	

List of Tables

Table 1 Means and Standard Deviation of Credibility Characteristics for Developmental Status and Disclosure Type	37
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### **Abstract**

Jurors play an essential part in the Criminal Justice System in England and Wales (Citizens Information Board, 2017), however research so far highlights that jurors perceptions of a witness can impact their decision making (Peled, Iarocci, & Connolly, 2004). To gain further insight into the impact of these perceptions, specifically in regards to vulnerable witness with autism spectrum condition (ASC), an online study was designed to examine whether these perceptions implicate the witness's perceived credibility. This study examined whether having the knowledge of the children's developmental status, impacted the potential jurors decision making in regards to four transcripts they had read; concerning a child being asked to recall events they had watched on a video. Fifty-four participants were requested to initially complete a self-report questionnaire, establishing their overall views of individuals with ASC; based on the Societal Attitudes towards Autism Scale (Flood, Bulgrin, & Morgan, 2013). The participants were then asked to complete one questionnaire after reading each child's transcript; based on eight credibility characteristics (Henry, Ridley, Perry, & Crane, 2011). The results showed a significant interaction between the children's developmental status and the disclosure of their developmental status in regards to the potential juror's perceptions of the vulnerable witness credibility, in respective to all eight credibility characteristics. In addition, the research also found that there was a significant relationship between the potential juror's scores on the Societal Attitudes towards Autism scale and the disclosure of ASC in regards to the vulnerable witnesses' perceived credibility, across five of the eight credibility characteristics. With a majority correlation, it is further suggested that potential jurors overall perceptions of a particular group within society is likely to influence their decisions in regards to a witnesses credibility in providing evidence.



## Introduction

Autism Spectrum Condition (ASC), otherwise known as Autism; was highlighted to the world by Leo Kanner, over 60 years ago (Neely-Barnes, Hall, Roberts, & Graff, 2011). Kanner's thoughts on the condition were influenced through his awareness of psychoanalytic theory (Neely-Barnes, Hall, Roberts, & Graff, 2011), but despite his interest in this area, Kanner maintained the condition was encouraged due to genetic influences (Kanner, 1943). Since that time however, research and the evidence base, which widely influences and shapes the support and view of ASC has significantly advanced (Mesibov, Adams, & Schopler, 2000).

Today, the origins of ASC are regarded as a product of the "conglomeration of genes that merge, modify or turn on/off early in development by the presence or absence of environmental factors" (Simonstein & Mashiach-Eizenberg, 2016, p. 1277). ASC is generally identified as a profound disorder in factors such as communication deficits, social interaction, and obsessive behaviours and interests (Harnum, Duffy, & Ferguson, 2007). The condition is viewed as presenting on a scale, arguably spanning from clinical to non-clinical levels (Lundström, et al., 2012). The Diagnostic and Statistical Manual of Mental Disorders V (DSM V) (2013) criteria for a diagnosis of ASC highlights that an individual with ASC will demonstrate "persistent deficits in social communication and social interaction across multiple contexts", demonstrated within three areas (The American Psychiatric Association, 2013, 299.00 (F84.0)). As well as "restricted, repetitive patterns of behaviour, interests, or activities", demonstrated across at least two of the three listed areas (The American Psychiatric Association, 2013, 299.00 (F84.0)). The DSM V additionally states that the criteria highlighted has to be present within the individuals "early developmental period", and that "symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning" (The American Psychiatric Association, 2013, 299.00 (F84.0)). To conclude the DSM V states

that the behaviours and symptoms it lists “are not better explained by intellectual disability (intellectual developmental disorder) or global delay” (The American Psychiatric Association, 2013, 299.00 (F84.0)).

Some researchers have argued that strict clinical methods, are not entirely suitable in recognising the extensive range of traits identified as belonging to ASC (Murray A. , Booth, McKenzie, & Kuenssberg, 2016), therefore it is maintained that a more in-depth assessment is necessary to provide recognition to the ‘autistic-like traits’ or ‘broader autism phenotype’ (Wheelwright, Auyeung, Allison, & Baron-Cohen, 2010). Consequently, due to the focus of traits being used as a measurement, assessments have been developed; such as the Broader Autism Phenotype Questionnaire (Hurley, Losh , Parlier, Reznick, & Piven, 2007). These assessments concentrate on identifying the magnitude and significance of the traits, instead of categorizing individuals into groups of those with or without ASC (Murray A. L., Booth, McKenzie, & Kuenssberg, 2016).

### **Stigmatisation and Exclusion of Individuals with Autism Spectrum Condition**

Traits of ASC are often viewed as unusual behaviours, and it is often the view of these behaviours that influence the public’s perceptions of those with the condition (Harnum, Duffy, & Ferguson, 2007). Parents in previous research have highlighted the unfortunate reception their children with ASC, and themselves have been exposed to, and the interpretation that their children are rude, disobedient, and unintelligent (Gray D. E., 2002). From destructive interpretations like these, stereotypes are formed, which in turn are influenced by a lack of understanding and knowledge of those that form the biases (Swaim & Morgan, 2001). ASC has been documented as being more common in individuals than Down syndrome or diabetes (Filipek, et al., 1999), however despite its

prevalence within society, discriminating attitudes and lack of understanding continue to fuel exclusion, stigmatisation and bullying (Humphrey & Lewis, 2008). Despite literature identifying a lack of understanding and discrimination towards individuals with ASC, research has found that individuals' perceptions of those with ASC is positively improved when they are aware the individual has autism in comparison to when they are not (Chambres, Auxiette, Vansingle, & Gil, 2008). However, in spite of Chambres, Auxiette, Vansingle, & Gil, (2008) study identifying a more positive outlook, by highlighting having the knowledge of an individual's condition can assist in the reduction and potential elimination of negative attitudes and discrimination, numerous other studies continue to highlight the continued stigmatisation and exclusion experienced by those with ASC (Humphrey & Lewis, 2008). One particular study, investigated whether the knowledge of a child having ASC, would positively influence their peers outlook and position towards them (Swaim & Morgan, 2001), similar to Chambres, Auxiette, Vansingle, & Gil, (2008) study. Disappointingly, this study found that despite the identification of ASC, negative and oppressive views of the children were still perceived (Swaim & Morgan, 2001). It has been argued that the knowledge of individual difference, actually highlights dissimilarities even more so, fuelling biases and stereotypes, instead of compassion and acceptance (Huws & Jones, 2010). This approach provides substance to the argument that children cultivate attitudes that support the group that they view they belong to, and in turn develop biases against peers they recognise as not being within their group (Bigler, Jones, & Lobliner, 1997).

### **Autism Spectrum Condition within Society**

Despite stereotypes and prejudices still identified as being prevalent in society (Myers, Mackintosh, & Goin-Kochel, 2009), legislation and policy within the United Kingdom, continues to demonstrate and highlight an ethos towards equality and inclusion

(see; Human Rights Act (1998), The Convention on the Rights of the Child (1989), The Equality Act (2010)). The United Nations defines an inclusive society where 'every individual, each with rights and responsibilities, has an active role to play' (United Nations, 1995, p. 68). However, as discussed above, it could be suggested that for those individuals with ASC, obstructions may be presented in achieving the United Nations, and the United Kingdom Governments prospects of the inclusive society they envision. An individual's inclusivity within society is arguably identifiable through many factors such as access to social contact with others, employment, and services supporting participation of inclusivity (Gray, et al., 2014). It has been suggested that barriers can be presented for many individuals within society and these may differ throughout region, cultures and communities (Dillenburger, McKerr, Jordan, Devine, & Keenan, 2015). Therefore due to research identifying potential biases and stereotypes still existing within society that could potentially hinder vulnerable individuals in achieving social inclusion, it is not surprising that increasing the prospects of social inclusion is a fundamental goal for areas such as health and social care, and education (Department of Health, 2001, Sansosti & Sansosti, 2012).

Within the United Kingdom, the education system, one viewed as encouraging inclusion and acceptance of all (Department for Education and Skills, 2004), arguably continues to have detrimental flaws in supporting children with ASC in mainstream schools, due to lack of understanding and training of staff (Davis & Florian, 2004). Therefore, meaning staff are unlikely to sufficiently meet and effectively support the complex needs of those with ASC (Davis & Florian, 2004). Despite an arguably limited research base that examines children with ASC experiences in this arena, it remains clear that school, remains an anxious and potentially traumatic experience for pupils (Carrington & Graham, 2001), where they are likely to experience bullying and isolation (Ochs, Kremer-Sadlik, Solomon, & Sirota, 2001).

Achievement of employment has been recognised as an important factor in improving and maintaining an individual's self-value, both physically and psychologically (Gerhardt & Lainer, 2011). In obtaining employment, an individual is recognised as successfully participating and being incorporated into society, as well as fulfilling an essential factor of adulthood (Bennett & Dukes, 2013). Nonetheless, obtaining employment; despite its benefits to the individual and the wider community, for individuals with ASC it is recognised as a complex task that some are unsuccessful in obtaining due to a combination of the challenges their condition brings, as well as society's outlook and support (Chen, Leader, Sung, & Leahy, 2015). Previous research has highlighted that those with ASC tend to be underemployed, receive low pay, and are offered volunteer work or low hours (Taylor & Seltzer, 2011). It could be suggested that this research indicates further the potential of individuals with ASC becoming victims of crime within this arena. Some researchers suggest that due to an individual with ASC's want to be incorporated within society and achieve within employment, this need may leave them vulnerable to exploitation and being taken advantage of (Jawaid, et al., 2012). Additionally, they may become a victim of crime due to potential discrimination and abuse they may receive from employers (Unger, 2002). Some employers and co-workers continued lack of understanding and appreciation of individual's individuality within their workforce, has been recognised as a significant contributor to lower numbers of employed individuals with ASC (Richards, 2012).

Research not only identifies the damning experiences individuals face accessing both education (Davis & Florian, 2004) and employment (Chen, Leader, Sung, & Leahy, 2015), but worryingly also recognises the challenges individuals with ASC face accessing health services (Cheak-Zamora & Farmer, 2015). This being despite children with ASC being habitually recognised as needing an increased level of access to health services to achieve their potential, in comparison to children with other health care needs

(Montes, Halterman, & Magyar, 2009). A wide array of research highlights the benefits of early intervention for children with ASC (Magiati, Charman, & Howlin, 2007), however regardless of the recognition of the importance of this, findings suggest that access to specialist tertiary services can be challenging and complex (Vohra, Madhavan, Sambamoorthi, & St Peter, 2014).

Within the United Kingdom researchers have also highlighted parent's constant discontent and frustration in regards to services providing diagnoses of ASC (Rogers, Goddard, Hill, Henry, & Crane, 2016). Frustration has been highlighted in a number of United Kingdom studies investigating the diagnostic process of ASC for children (Crane, Chester, Goddard, Henry, & Hill, 2016). This being despite research recognising the key link between a positive experience of diagnosis and its implications on obtaining appropriate support services and early effective interventions (Webb, Jones, Kelly, & Dawson, 2014). Furthermore, parents within the United Kingdom, who have children with ASC have highlighted increasing concerns about the services and support provided for themselves and their children once a diagnosis has been achieved (Crane, Chester, Goddard, Henry, & Hill, 2016). As well as a rise in differing opinions between parents and professionals, in regards to the appropriateness and necessity of services and support to empower their children to achieve their potential (Boshoff, Gibbs, Phillips, Wiles, & Porter, 2016).

More worryingly vulnerable groups within society, such as those with intellectual disabilities, are at greater risk of experiencing abuse and discrimination with a health care setting than the general population (Marsland, Oakes, & White, 2007). This being despite these services being designed to empower and protect those they support, reports continue to expose the damaging experiences and crimes these vulnerable individuals have experienced (Pring, 2005). A significant amount of government reports and recommendations have highlighted the worrying facts that abuse within these

settings continues to exist despite numerous guidance and policy promoting and requiring good practice (Department of Health, 2000, Department of Health, 2001). Quigley, (2001) highlights that the reasons behind abuse within professional care settings presents as being complex. Researchers have indicated that discrimination and abuse could be encouraged, due to roles and service cultures that may be stimulated in such environments (White, Holland, Marsland, & Oakes, 2003). Though, the theory of the 'bad apple' remains poignant, highlighting the destructive effect having a number of individuals within a work force, who are cruel and deviant towards those who are vulnerable (McCarthy & Thompson, 1996). As well as abuse, researchers have identified discrimination experienced by vulnerable individuals and the potential barriers these unjust attitudes can provide in ensuring vulnerable individuals receive appropriate treatment outcomes and support (Arvaniti, et al., 2009).

Children who have received a diagnosis ASC, and therefore may potentially display behaviours such as social and communication deficits (Venkatesan & Ravindran, 2015), have been reported as being at an increased risk of rejection, hostile responses and poor treatment within society (Harnum , Duffy, & Ferguson, 2007). Farrugia, (2009), suggests the development of ASC etiology is the foundation of prejudiced stereotype of ASC that has formulated over the years. Stigmatisation and discrimination towards those with ASC, is recognised as being dominant across the world (Obeid, et al., 2015). It has been suggested that disproportion of understanding across populations, fuels a lack of evidence base views which triggers unacceptable actions towards individuals with ASC (Ravindran & Myers, 2012). Furthermore, an absence of visual signs that an individual has ASC, may also fuel perceptions of the individual in regards to their ASC traits being unacceptable in regards to social norms (Corrigan , Markowitz, Watson, Rowan, & Kubiak, 2003). It is recognised that uninformed stereotypes are moulded due to the

society's lack of knowledge, which are then suggested as instigating poor outcomes potentially across all areas of an individuals' life (Gray D. E., 2002).

### **Vulnerable Witnesses within the Criminal Justice System in England and Wales**

A witness and/or a vulnerable witness within the United Kingdom is not just someone who has seen a crime being committed (Hertfordshire Police and Crime Commissioner, 2015). Within the United Kingdom, someone who has been a victim of a crime, has specialist knowledge, or knows someone within a case and provides a testimony in support of their trustworthiness, are all identified as a witness within Criminal Justice proceedings (Hertfordshire Police and Crime Commissioner, 2015). Within the Criminal Justice System in England and Wales, a 'vulnerable witness' is defined under sections 16 and 17 of The Youth Justice and Criminal Evidence Act (1999). The legislation identifies 'vulnerable witnesses' as individuals who are recognised within the legal framework in England and Wales as either entitled to support due to their 'age' or 'incapacity' (The Youth Justice and Criminal Evidence Act, 1999, Section 16); or 'on grounds of fear or distress about testifying' (The Youth Justice and Criminal Evidence Act, 1999, Section 17). For those individuals recognised under the two sections of The Youth Justice and Criminal Evidence Act (1999), as 'vulnerable witnesses', the act identifies that 'Special Measures' should be applied, in agreement with the court, to assist individuals in providing their 'best evidence in court' as well as to support them by reducing the potential stress that may be experience when providing evidence (Crown Prosecution Service, 2004). It is important to highlight that these measures are only available to be utilised by prosecution and defence witnesses during court proceedings, and are to be employed at the discretion of the court (Crown Prosecution Service, 2004). Present legislation currently excludes those who are accused in having access to Special Measures, however judges can use their inherent power to employ measures, such as



intermediaries to assist youth defendants to prepare for trials so that they can partake efficiently (Crown Prosecution Service, 2004). It is recommended under the Code of Practice for Victims of Crime (Ministry of Justice, 2015), that these measures are to be considered at the earliest stage of the court proceedings, and that the victim of the crime should be empowered to express their views on the matter (Crown Prosecution Service, 2004).

It has been emphasised that witnesses who have been recognised as being vulnerable within the Criminal Justice System, are at an increased risk of victimisation than any other individual within the general public (Sin, Hedges, Cook, Mguni, & Comber, 2009). Researchers continue to highlight that individuals who have an intellectual disability, are continually documented as being twice as likely to be a victim of crime, than any other member of the general public (Horner-Johnson & Drum, 2006). Disappointingly, research so far has also recognises that despite the likelihood of becoming a victim of crime, individuals with an intellectual disability are documented as being unlikely to report crimes they have fallen victim to (Willner, 2011). Skogan, (1984) identifies five factors that may prevent victims reporting the crimes that they have fallen victim to. These being the victims attitude towards the Police, the effect of the victimisation, circumstances around compensation or insurance payments, the victim-perpetrator relationship and previous behaviour of the victim (Skogan, 1984). Arguably, those with intellectual disabilities may be put off reporting crimes against them due to some of the above factors, as well as due to their concern around potential stigmatisation and discrimination that they may experience due to their intellectual disability (Henshaw & Thomas, 2012). It has also been suggested that those with an intellectual disability, are at an increased likelihood to encounter rejection by the Criminal Justice System, than the general public when reporting crimes against them (Willner, 2011). Rejection may be experienced either through the environment in which the vulnerable witness finds

themselves in, or through the individuals in which they encounter. The environments such as Police stations or law courts could present those with sensory issues with an uncomfortable experience, due to potentially being hectic and loud (Autism West Midlands, 2015). In addition the individuals themselves may also present rejecting factors of inclusivity, due to their reception and interpretation of the vulnerable witness, as well support factors in place so to assist effective communication between the vulnerable witness and Criminal Justice Professional (Adebowale, 2013). Worryingly, the potential rejection is also documented as being fuelled by an assumption that individuals with an intellectual disability are unable to provide reliable evidence in regards to the crime in which they have been subjected to or seen (Petersilia, 2001).

In regards to children, as identified under section 16 of The Youth and Criminal Evidence Act (1999), a range of Special Measures may be accessible for the child to support them in conveying their information in the least harmful manner for themselves. It is essential during the period of discussions in regards to applying Special Measures, that the child is supported to reach an informed decision on whether they feel the specific measures applied for them, will positively assist them during the court proceedings (Ministry of Justice, 2011). Measures that can be put in place for those that are deemed vulnerable may be that they can appear via a live link, examination of the vulnerable witness via an intermediary, and/or the removal of wigs and gowns by the judge and barristers (The Youth Justice and Criminal Evidence Act, 1999). The Criminal Prosecution Service highlight that research conducted by the NSPCC recognises that children who are witnesses identify that they are afraid of the defendant seeing them, and therefore recommend that it is crucial that the child is assisted in reaching an informed choice about the manner in which they wish to provide their evidence (Crown Prosecution Service, 2004). Research highlights that within the court room child witnesses can experience further victimisation due to being exposed to their perpetrator

within court (Parker, 1982). The psychological effects of a child having to provide a detailed account of what a perpetrator did to them or someone close to them is potentially damning, and can effectively re-traumatise the vulnerable witness (Berliner & Barbieri, 1984).

In addition to Special Measures (The Youth Justice and Criminal Evidence Act, 1999), the Criminal Justice System in England and Wales, also has employed several other guidelines on how best to support children during their process of providing evidence. Achieving Best Evidence highlights how best to ensure 'good practice' is employed to individuals identified within the legal framework as victims and witnesses (Ministry of Justice, 2011). It also specifies how best to support these individual's so to enable them to provide their 'best evidence' within court proceedings (Ministry of Justice, 2011). Though the document is classified as guidance only, it specifically highlights that it is a document that works towards applying practice that the United Kingdom Government feels that its justice system is seen to be 'fair' and 'accessible', as well as ensuring that the system conveys the justice that it believes its witnesses 'need, deserve and demand' (Ministry of Justice, 2011). The advisory document covers recommendations for several stages of the justice system from the preparation and planning of interviews to the preparation and planning of court appearances (Ministry of Justice, 2011). The document recommends that this good practice should be applied by an array of professionals who may be involved or have contact with witnesses, including the Police, Social Care workers and individuals from the legal profession (Ministry of Justice, 2011).

Within the Criminal Justice System best practice documents, as highlighted above, do exist to support a decrease in the potentially harmful situations vulnerable witnesses may find themselves in, as well encouraging the promotion of equality and inclusivity (Barnett, Brodsky, & Price, 2007). However, compulsory necessities in place

across education and health and social care facilities, are not applicable within the Criminal Justice System (Crane L. , Maras, Hawken, Mulcahy, & Memon, 2016), this being despite the legislation in place to support and guide the interaction of public services and those with ASC (See Autism Act, (2009) and Equality Act, (2010)). With the lack of compulsory requirements that are in place for the wider society, it could be advocated that those with ASC are significantly more vulnerable if they found themselves in contact with the Criminal Justice System (Cummins, 2011). After the highly publicised case in 2012 where a 16 year old male, with diagnosis's of both ASC and epilepsy was restrained by Police, a report was released identifying that further training and information needed to be provided to Police staff in regards to appropriate communication skills to communicate effectively with individuals who have mental health difficulties, intellectual disabilities and autism (Adebowale, 2013).

Research has acknowledged that there are several risk factors individuals with ASC may be subject to because of their condition, which may contribute to them being identified as over-represented within the criminal justice system as victims and witnesses, especially within personal or violent crimes (Petersilia, 2001). These factors have previously been identified as areas such as social inexperience, lack of insight into others intentions, as well as monotonous and categorised interests (Maras & Bowler, 2014). Despite figures identifying those with autism as being more prevalent within the criminal justice system, further research continues to highlight the complications police officers have in recognising individuals with intellectual disabilities as vulnerable witnesses (Plotnikoff & Woolfson, 2007). Despite this Milne and Bull (2001), highlight that previous research has recognised that when questioned effectively witnesses with an intellectual disability, can recall correct accounts of what they are being queried about.

Individuals providing eye witness accounts will require episodic memory to retrieve their account of the events in which they are recalling. This form of memory is

documented as being reliant upon autonoetic consciousness, which necessitates a 'self' within time, that has experienced past and present experiences in relation to that specific 'self' (Hare, Mellor, & Azmi, 2007). Individuals with ASC are reported as experiencing deficits in their episodic memory, leaving them recognised as having reduced ability to freely recall events (Bowler, Gardiner, & Gaigg, 2007). Previous studies highlight that individuals with ASC are able to recall less details from their memory in regards to an event from their past, as well as taking longer to recover such memories, than those in their typically developing comparison group (Bruck, London, Landa, & Goodman, 2007; Goddard, Howlin, Dritschel, & Patel, 2007). However despite these findings, researchers have found that if questioned about an event in an appropriate and effective manner, the information provided by individuals with ASC is in fact no less accurate in the details provided, compared to their comparison group (Maras, Memon, Lambrechts, & Bowler, 2013, McCrory, Henry, & Happe, 2007).

Within the United Kingdom, current best practice guidance recommends police officers pursue interviews with an individual with ASC through the means of free recall, due to this technique being identified as being a precise method of assisting an eyewitness to remember (Mattison, Dando, & Ormerod, 2015). In addition to the technique being identified as extremely beneficial and supportive in assisting the vulnerable witness, due to it being perceived as positively lacking intrusion from the interviewer, it is additionally highly thought of within the Criminal Justice System (Mattison, Dando, & Ormerod, 2015). However despite this positive practice, researchers continue to highlight that a high proportion of complaints made by children with intellectual disabilities, are not being dealt with in the appropriate manner in regards to interviewing (Clare & Murphy, 2001). As well as highlighting that few guilty verdicts are being found when vulnerable witness's cases have progressed through the court process (Agnew, Powell, & Snow, 2006).

### **Juror's Perceptions of Vulnerable Witnesses**

Jurors play a crucial role within the Criminal Justice System in England and Wales (Citizens Information Board, 2017). Their role within court proceedings is one that deems them responsible in concluding whether an individual is to be found guilty or not guilty, by determining whether the information presented to them provides crucial evidence needed to make a life changing decision (Citizens Information Board, 2017). Through the process of this decision jurors may be presented with witnesses, both via the prosecution and defence (Citizens Information Board, 2017). Research has found that jurors may determine a witness's credibility via various factors of a witness's characteristics, such as their age and their connection to the crime (Pozzulo & Dempsey, 2009). The age of a witness in the eyes of a jury has been identified as being a prominent characteristic in which a juror takes into account when considering how believable a witness is (Goodman & Schaaf, 1997). Research has indicated that younger children in the eyes of a jury are seen as demonstrating less believability than older children or adults, when recounting information (Nikonova & Ogloff, 2005). Whilst prior studies, such as Gabora, Spanos, & Joab, (1993), have indicated conflicting findings, highlighting that in fact older children are deemed less believable, due to hypothesising that their findings indicated that their potential jurors felt that younger children were perceived as less likely to tell untruths and were seen as having greater innocence. Reasoning for the perceived reactions of children are well documented (Cossins, 2006), children's reactions within the court and its process arguably can have detrimental effects on their delivery of information and demeanour during cross examination (Righarts, Jack, Zajac, & Hayne, 2015). This in turn can further implicate the perception of the accuracy in which children recall requested information, which in turn has the potential to impact the jury's position on the child's credibility and lead to an unlikely conviction (Berman & Cutler, 1996).

Furthermore, how a child has chosen to deliver their evidence to the court, is also identified as an influencing factor to how credible a child is perceived in the eyes of a jury (Landström, Granhag, & Hartwig, 2007). Prior research heavily indicates that children are perceived as more credible when presenting their evidence within the court, in comparison to presenting it via video link (Eaton, Ball, & O'Callaghan, 2001).

It would appear that research indicates discrepancies in the credibility and believability of a child witness, with many arguing that they are seen as less credible than adults (Collins, Harker, & Antonopoulos, 2017). Furthermore, child witnesses with intellectual disabilities are recognised as being identified by jurors as having even less credibility in regards to the evidence in which they have presented (Henry, Ridley, Perry, & Crane, 2011). This despite a growing evidence base that suggests children with intellectual disabilities have the capacity to accurately react to free recall instructions at a high standard, though the amount of information may be less than typically developed children (Agnew & Powell, 2004). However a jury's perceptions, stereotypes, and biases can outweigh the evidence base that suggests the credibility of a child with an intellectual disability has the ability to be a credible witness (Peled, Iarocci, & Connolly, 2004). Previous research has recognised that if a child doesn't present with communication behaviours a juror would expect or stereotype the perception of the child in relation to the child's biological age; this indicating that the juror's perception of the child's credibility is diminished further (Schmidt & Brigham, 1996). This theory has led prior researchers to call into question the likelihood of a conviction, if the age and developmental biases held by jurors implicate their decision making (Goodman, Golding, Helgeson, Haith, & Michelli, 1987)

Interestingly, Henry, Ridley, Perry, & Crane (2011), study examined mock juror's perceptions of transcripts without the knowledge that the child author either was identified as typically developing child or a child who identified as having an intellectual

disability. Their study aimed to identify whether credibility of the information presented in the transcripts was assisted with either the ability of free recall or in fact the child's characteristics (Henry, Ridley, Perry, & Crane, 2011). The results of the study identified that the jurors in fact identified the children with intellectual disabilities as less credible due to the volume of information presented in the transcript (Henry, Ridley, Perry, & Crane, 2011). This led Henry, Ridley, Perry, & Crane, (2011), to conclude that even when jurors do not have the knowledge that a child witness has in fact got an intellectual disability, this characteristic does continue to effect the jurors decisioning around the witnesses credibility.

The evidence base established so far, would indicate that behaviours displayed by individuals with ASC could strongly contribute to biases and stereotypes members of the public hold (Huws & Jones, 2010). This worrying detail, could in fact provide further concern in regards to how children with ASC; who have the potential to be identified as vulnerable witnesses, due to the alarming research that identifies them as likely targets of discrimination (Neely-Barnes, Hall, Roberts, & Graff, 2011); are perceived by potential jurors. Though there is guidance and policy set out to support and prevent the further discrimination of adults and children with ASC (Autism Act, 2009; The Crown Prosecution Service, 2004), further consideration needs to be applied to determine whether discrepancies in potential jurors knowledge bases in regards to ASC (Ravindran & Myers, 2012), could in fact influence a potential juror's decision making about the perceived credibility of a child with ASC. Therefore the aim of this research is to identify whether the public's perception of vulnerable witnesses with ASC, impacts on their decision of the individuals credibility. Hypothesis one of this research is that there will be a significant interaction between the children's developmental status and disclosure of their developmental status on potential juror's perceptions of the vulnerable witness credibility. Hypothesis two of this research is that there will a significant relationship



between potential juror's scores on the Societal Attitudes towards Autism scale and the disclosure of ASC in regards to the vulnerable witnesses perceived credibility.

## Method

### Participants

Fifty-four participants were recruited in total, 46 identified as female ( $M = 38.67$  years,  $SD = 13.134$ ), and eight identified as male ( $M = 36.63$  years,  $SD = 9.797$ ). Further demographic details such as age in years ( $M = 38.37$  years,  $SD = 12.636$ ) and occupation status were obtained also. Forty-three participants identified themselves as full/part time employed, four identified themselves as self-employed, none identified themselves as unemployed, five identified themselves as students, and two identified themselves as 'other'.

Participants were recruited via opportunity sampling, through the means of social media, specifically Facebook. To maintain and ensure confidentiality, participants were not asked for any further demographic information so to ensure they are not identifiable. Ethical approval was obtained from the University of Chester Psychology Department Ethics Committee before data collection was initiated. The research was directed and abided by the British Psychological Society's ethical guidelines (The British Psychological Society, 2009).

### Measures and Stimuli

Three questionnaires and four transcripts were distributed to participants.

**Societal attitudes towards autism scale.** The initial questionnaire presented in this study measured the individual's attitudes towards ASC, and utilised the Societal Attitudes towards Autism Scale (Flood, Bulgrin, & Morgan, 2013). The original scale by Flood, Bulgrin, & Morgan, (2013), was comprised of 16 items, five personal distance items and five knowledge items. Flood, Bulgrin, & Morgan, (2013) scale was finalised

into a 16 item scale, after pilot studies were completed into a total of 75 items. The scale comprised for the purposes of this study utilised a 26 item scale (See appendix A) due to it previously indicating construct validity and having robust content (Flood, Bulgrin, & Morgan, 2013). The items utilised identified a mixture of positive, eight items, and negative, 18 items, statements of attitudes towards individuals with ASC. Previous scales utilised have concentrated on identifying individual's attitudes towards disabilities on a universal level, instead of the identification of attitudes towards a specific disability (Seo & Chen, 2009). It is argued the Societal Attitudes towards Autism Scale assists in the gap of measurement, by enabling the measurement of the general public's attitudes to Autism Spectrum Condition specifically (Flood, Bulgrin, & Morgan, 2013). It has been suggested the Societal Attitudes towards Autism scale, is the only scale currently that is able to measure individuals within the general public, attitudes specifically toward ASC (Dachez, Ndobu, & Ameline, 2015). For the purposes of this study a seven-point Likert scale alongside the 26 items, enabled participants to identify their internal beliefs and potential discrimination in regards to ASC. The seven-point Likert scale ranged from, one, strongly agree to seven, strongly disagree.

**Transcripts.** To assist in the identification of the public's perceptions of individuals with ASC, four transcripts were individually provided to participants. The transcripts detailed a conversation between an interviewer (identified in transcript as 'Interviewer'), who proposed questions and comments to an individual child (identified in transcripts as 'Child'). The transcripts were compiled after the children had previously watched a video showing a non-violent and non-distressing shop theft, and contain the dialogue between themselves and the interviewer, as they recall the events shown in the video. Two of the children who took part were diagnosed as having ASC, and two weren't. The four transcripts utilised (See appendix B) were previously collected data, from prior research (Mattison, Dando, & Ormerod, 2015; 2016). The original research

concerned children with ASC's ability to recall information in regards to a non-violent shop theft that they had watch, prior to an interview. The conversation between the interviewer and the children was audio recorded, then transcribed and coded via a scoring template technique afterwards. Consent was gained by the original authors to carry out the research with the children who took part in the original research. Permission to use the transcripts was gained via the original researches first author, who additionally due to their broad experience of interviewing vulnerable witnesses, carried out all the interviews of the transcripts used. This knowledge additionally highlights a reduced chance of interviewer variability (See Mattison, Dando, & Ormerod, (2015), (2016)).

**Characteristics of credibility questionnaire.** To examine participant's perceptions of the child witness's credibility, presented to them via the four transcripts, a questionnaire was compiled relating to eight characteristics of credibility (See appendix C). The items utilised within the questionnaire were assembled through characteristics identified in previous research, as being successful in assisting in the identification of participant's beliefs of a witnesses' credibility (Henry, Ridley, Perry, & Crane, 2011; Stobbs & Kebbell, 2003). Henry, Ridley, Perry, & Crane, (2011) study, as well as previous studies (Mueller-Johnson, Toglia, Sweeney, & Ceci, 2007), recognised perceived credibility, as being identifiable through eight characteristics. Stobbs & Kebbell, (2003), additionally identified six characteristics within their research which they recognised as identifying participants perceptions of witness credibility. For the purpose of this research, eight characteristics were identified from Henry, Ridley, Perry, & Crane, (2011) and Stobbs & Kebbell, (2003) research, to identify participant's perceptions of witness credibility within this research. These being; capability, truthfulness, confidence, credibility, competency, accuracy, believability, honesty. Two statements for each characteristic was identified, with one promoting a positive perception of credibility, and the other promoting a negative view. Sixteen statements were presented, with a seven-

point Likert scale for each statement, ranging from, one, strongly agree to seven, strongly disagree.

## **Procedure**

Participants were recruited via a post advertised on Facebook, advising potential participants if they wanted to take part in the study, to send a private message to the researcher advising they wished to do so (See appendix D). Once private messages were received from potential participants, a link was sent to them so to enable them to complete the survey online, designed and distributed via Bristol Online Surveys. Participants were also thanked for their interest in participation. Participants once opening the link they were sent, were then greeted by the study information sheet, detailing the purpose, content, benefits and risks of participation of the study, as well as confidentiality information, and useful contacts (See appendix E). At this point participants were only aware that the survey aimed to investigate the publics' perceptions of vulnerable witnesses, specifically children with autism. Additionally participants were advised that the information obtained aimed to observe how vulnerable witnesses are viewed by individuals who have the potential to be jurors themselves within the criminal justice system. Participants were then advised that their participation was entirely voluntary and that they could withdraw at any time, participants were then asked to continue onto the study.

The study then requested demographic information identified above, as well as providing opportunity for University of Chester participants to provide their RPS code, so 2 credits could be awarded to them. On completion of this information participants were then asked to complete the initial Societal Attitudes towards Autism (Flood, Bulgrin, & Morgan, 2013), questionnaire. After the initial questionnaire, participants were then

presented with the transcript stage of the study. Out of the four transcripts presented, one identified that the child has ASC, one identified that the child was typically developing and the final two transcripts did not disclose or make comment in regards to the children's developmental statuses. Therefore two disclosed the developmental status of the children and two did not disclose the developmental status of the children. The transcripts were presented in this manner in an attempt to identify whether the disclosure of a child's developmental status altered the perceptions of how the witness's credibility is perceived.

Participants were asked to read the first transcript, where they were advised at the beginning that the child being interviewed had a diagnosis of ASC. Participants were then presented with the 16 statements of perceived credibility and asked to rate the statements (Henry, Ridley, Perry, & Crane, 2011; Stobbs & Kebbell, 2003), using the seven-point Likert scale provided, in regards to the transcript they had just read. Participants were then asked to repeat this procedure for the remaining 3 transcripts. In the second and third transcripts the participants were not advised whether the child witness had a diagnosis of ASC or was a typically developing child. However on reading the final transcript they were advised that the child was typically developing. On completion of reading the four transcripts and completing the subsequent credibility questionnaires, participants were then directed to a debrief page (See appendix F).

The debrief page thanked participants for their time, as well as providing further information in regards to the purpose and aim of the study. Information provided initially on the information sheet in regards to help lines and support, was reiterated again, to ensure appropriate support services were signposted. Participants were additionally advised at this point that the purpose of the study was to investigate the public's perceptions of vulnerable witnesses, specifically children with autism, within a criminal justice context. Participants were also advised at this point, that the research aimed to

identify and assist in the eradication of social prejudices towards children with autism who are witnesses, by potential jurors. No monetary payment was made to any participant for completion of the survey, as specified on the information page (See appendix E).

### **Design and Analysis**

A within subjects design was employed with two factors, (1) ASC developmental status, (2) typically developing developmental status, each with two levels (1) Disclosure of developmental status, (2) Non-disclosure of developmental status. All questionnaires were included in the analysis, including those that were partially completed, six. A series of 2x2 ANOVA's were carried out across all four conditions for each credibility characteristic; capability, truthfulness, confidence, credibility, competency, accuracy, believability, honesty. A series of post hoc tests (paired sample *t*-tests) were also conducted on all eight characteristics to explore any interaction further, applying a reduced alpha level; Bonferroni correction (0.025). Bivariate analysis, specifically Pearson's correlation coefficient, was carried out on the scores all eight characteristics of credibility; specifically results concerned with the disclosure and non-disclosure of children with ASC, and participants total score on their Societal Attitudes towards Autism scale score. The data was analysed using IBM SPSS statistical package, version 23.

## Results

Twenty-one participants identified as having personal experiences of ASC, 66 identified as not having any experiences, and three advised they would prefer not to say. In total twenty-one chose to articulate their experiences in the space provided. In regards to stages of completion of the questionnaire, 48 participants completed the whole questionnaire, and six partly completed the questionnaire.

A series of 2x2 repeated measures ANOVA were carried out across the four conditions ((1) ASC developmental status, (2) typically developing developmental status, each with two levels (1) Disclosure of developmental status, (2) Non-disclosure of developmental status) used as independent variables, concerning the eight identified characteristics of credibility; capability, truthfulness, confidence, credibility, competency, accuracy, believability, honesty, utilised as the dependent variable (Henry, Ridley, Perry, & Crane (2011), Stobbs & Kebbell (2003)).

Examination of the means identified that the participants, when having the knowledge that the child had ASC, scored their transcripts as more credible across all eight characteristics, than the transcripts that identified the typically developing child. In addition, the means also highlight that without the knowledge of whether the child has ASC or is typically developing, potential jurors scored the typically developing child as more credible than the child with ASC, across all of the eight characteristics identified. The total score that could be given to each individual credibility characteristic was fourteen (See Table 1).



Table 1:  
*Means and standard deviation scores of the credibility characteristics*

Credibility Characteristic	Developmental Status	Disclosed	Not Disclosed
Capability	ASC	10.96 (SD= 2.22)	8.26 (SD= 2.81)
	Typically Developing	7.93 (SD= 3.16)	12.48(SD= 2.68)
Truthfulness	ASC	11.64 (SD= 1.83)	9.96 (SD= 2.64)
	Typically Developing	10.91 (SD= 2.29)	12.11(SD= 2.25)
Confidence	ASC	9.72 (SD= 2.62)	5.60 (SD= 2.41)
	Typically Developing	6.34 (SD= 2.92)	12.15(SD= 2.24)
Credibility	ASC	10.92(SD= 2.22)	7.47 (SD= 2.71)
	Typically Developing	8.25 (SD= 2.87)	12.25 (SD= 2.0)
Competency	ASC	10.85 (SD= 2.19)	7.72 (SD= 2.66)
	Typically Developing	8.09 (SD= 2.74)	12.21 (SD= 1.97)
Accuracy	ASC	9.77 (SD= 2.58)	6.13 (SD= 2.61)
	Typically Developing	7.13 (SD= 3.28)	12.30 (SD= 2.34)
Believability	ASC	10.89 (SD= 2.61)	7.74 (SD= 3.01)
	Typically Developing	9.68 (SD= 2.82)	12.19 (SD= 2.32)
Honesty	ASC	11.81 (SD= 1.85)	9.83 (SD= 2.63)
	Typically Developing	11.08 (SD= 2.25)	12.23 (SD= 2.24)

Note: SD= Standard Deviation

## Capability

There was no significant effect of the developmental status on participants perceptions of the children's capability,  $F(1,53) = 3.595$ ,  $p = 0.063$ ,  $\eta^2 = 0.064$ . However, there was a significant effect of disclosure on participants perceptions of the children's capability,  $F(1,53) = 11.143$ ,  $p = 0.002$ ,  $\eta^2 = 0.174$ . When participants were not aware of the children's developmental status, they perceived their capability to be higher. There was a significant interaction between the children's developmental status and disclosure of their developmental status when participants were rating the children's capability,  $F(1,53) = 108.630$ ,  $p < 0.001$ ,  $\eta^2 = 0.672$ . To explore the interaction paired samples  $t$ -tests were conducted, applying Bonferroni correction (0.025). The paired samples  $t$ -test

identified a significant difference in regards to the typically developing children and both disclosure statuses,  $t(53) = -10.214, p < 0.001$ . When the developmental status of the typically developing children was disclosed to the participants they were perceived as less capable. The paired samples  $t$ -test also identified a significant difference in regards to the children with ASC and the disclosure and non-disclosure of the developmental status,  $t(53) = 6.084, p < 0.001$ . When the developmental status of the children with ASC was disclosed to the participants they were perceived as more capable.

To explore the relationship between the Societal Attitudes towards Autism scale scores ( $M = 152.91$   $SD = 18.717$ ) and the disclosure of ASC in regards to the child's perceived capability ( $M = 10.96$   $SD = 2.215$ ), Pearson's correlation revealed a significant relationship,  $r = 0.424, p = 0.001, n = 54$ . When scoring the child with the knowledge of the ASC, results indicate a positive correlation between the capability score and the Societal Attitudes towards Autism scale score. However, there was no significant linear relationship between the Societal Attitudes towards Autism scale scores ( $M = 152.91$   $SD = 18.717$ ) and the non-disclosure of ASC in regards to the child's perceived capability ( $M = 10.96$   $SD = 2.215$ ),  $r = -.105, p = 0.451, n = 54$ .

### **Truthfulness**

There was a significant effect of developmental status on participants perceptions of the children's truthfulness,  $F(1,52) = 7.551, p = 0.008, \eta^2 = 0.127$ . When participants scored the typically developing children they perceived their truthfulness to be higher, than the children with ASC. However, there was no significant effect of disclosure on participants perceptions of the children's truthfulness,  $F(1,52) = 0.950, p = 0.334, \eta^2 = 0.018$ . There was a significant interaction between the children's developmental status and disclosure of their developmental status when participants were rating the children's

truthfulness,  $F(1,52) = 35.925$ ,  $p < 0.001$ ,  $\eta^2 = 0.409$ . To explore the interaction paired samples  $t$ -tests were conducted, applying Bonferroni correction (0.025). The paired samples  $t$ -test identified a significant difference in regards to the children with ASC and the disclosure and non-disclosure of the developmental status,  $t(53) = 4.766$ ,  $p < 0.001$ . When the developmental status of the children with ASC was disclosed to the participants they were perceived as more truthful. The paired samples  $t$ -test also identified a significant difference in regards to the typically developing children and the disclosure and non-disclosure of the developmental status,  $t(52) = -3.644$ ,  $p = 0.001$ . When the developmental status of the typically developing children was disclosed to the participants they were perceived as less truthful.

To explore the relationship between the Societal Attitudes towards Autism scale scores ( $M = 152.91$   $SD = 18.717$ ) and the disclosure of ASC in regards to the child's perceived truthfulness ( $M = 11.69$   $SD = 1.841$ ), Pearson's correlation revealed there was no significant relationship,  $r = 0.175$ ,  $p = 0.206$ ,  $n = 54$ . Also, there was no significant linear relationship between the Societal Attitudes towards Autism scale scores ( $M = 152.91$   $SD = 18.717$ ) and the non-disclosure of ASC in regards to the child's perceived truthfulness ( $M = 10.04$   $SD = 2.670$ ),  $r = 0.006$ ,  $p = 0.965$ ,  $n = 54$ .

## Confidence

There was a significant effect of developmental status on participants perceptions of the children's confidence,  $F(1,52) = 45.887$ ,  $p < 0.001$ ,  $\eta^2 = 0.469$ . When participants scored the typically developing children they perceived their confidence to be higher, than the children with ASC. There was also a significant effect of disclosure on participants perceptions of the children's confidence,  $F(1,52) = 5.492$ ,  $p = 0.023$ ,  $\eta^2 = 0.096$ . Participants when not provided with a disclosure of the children's developmental

status, perceived the children's confidence to be higher, than when they were provided with a developmental status. There was a significant interaction between the children's developmental status and disclosure of their developmental status when participants were rating the children's confidence,  $F(1,52) = 190.135$ ,  $p < 0.001$ ,  $\eta^2 = 0.785$ . To explore the interaction paired samples *t*-tests were conducted, applying Bonferroni correction (0.025). The paired samples *t*-test identified a significant difference in regards to the children with ASC and the disclosure and non-disclosure of the developmental status,  $t(53) = 7.570$ ,  $p < 0.001$ . When the developmental status of the children with ASC was disclosed to the participants they were perceived as more confident. The paired samples *t*-test also identified a significant difference in regards to the typically developing children and the disclosure and non-disclosure of the developmental status,  $t(52) = -10.813$ ,  $p < 0.001$ . When the developmental status of the typically developing children was disclosed to the participants they were perceived as less confident.

To explore the relationship between the Societal Attitudes towards Autism scale scores ( $M = 152.91$   $SD = 18.717$ ) and the disclosure of ASC in regards to the child's perceived confidence ( $M = 9.56$   $SD = 2.853$ ), Pearson's correlation revealed a significant relationship,  $r = 0.455$ ,  $p = 0.001$ ,  $n = 54$ . When scoring the child with the knowledge of the ASC, results indicate a positive correlation between the confidence score and the Societal Attitudes towards Autism scale scores. However, there was no significant linear relationship between the Societal Attitudes towards Autism scale scores ( $M = 152.91$   $SD = 18.717$ ) and the non-disclosure of ASC in regards to the child's perceived confidence ( $M = 5.65$   $SD = 2.412$ ),  $r = 0.56$ ,  $p = 0.689$ ,  $n = 54$ .

## Credibility

There was a significant effect of developmental status on participants perceptions of the children's credibility,  $F(1,52) = 19.481$ ,  $p < 0.001$ ,  $\eta^2 = 0.273$ . Participants scored the children with a typically developing developmental status as having greater credibility, than the children with ASC. However, there was no significant effect of disclosure on participants perceptions of the children's credibility,  $F(1,52) = 1.084$ ,  $p = 0.303$ ,  $\eta^2 = 0.020$ . There was a significant interaction between the children's developmental status and disclosure of their developmental status when participants were rating the children's credibility,  $F(1,52) = 111.483$ ,  $p < 0.001$ ,  $\eta^2 = 0.682$ . To explore the interaction paired samples  $t$ -tests were conducted, applying Bonferroni correction (0.025). The paired samples  $t$ -test identified a significant difference in regards to the children with ASC and the disclosure and non-disclosure of the developmental status,  $t(53) = 8.167$ ,  $p < 0.001$ . When the developmental status of the children with ASC was disclosed to the participants they were perceived as more credible. The paired samples  $t$ -test also identified a significant difference in regards to the typically developing children and the disclosure and non-disclosure of the developmental status,  $t(52) = -8.675$ ,  $p < 0.001$ . When the developmental status of the typically developing children was disclosed to the participants they were perceived as less credible.

To explore the relationship between the Societal Attitudes towards Autism scale scores ( $M = 152.91$   $SD = 18.717$ ) and the disclosure of ASC in regards to the child's perceived credibility ( $M = 10.87$   $SD = 2.232$ ), Pearson's correlation revealed a significant relationship,  $r = 0.468$ ,  $p < 0.001$ ,  $n = 54$ . When scoring the child with the knowledge of the ASC, results indicate a positive correlation between the credibility score and the Societal Attitudes towards Autism scale scores. However, there was no significant linear relationship between the Societal Attitudes towards Autism scale score ( $M = 152.91$   $SD =$

18.717) and the non-disclosure of ASC in regards to the child's perceived credibility ( $M = 7.48$   $SD = 2.683$ ),  $r = 0.132$ ,  $p = 0.340$ ,  $n = 54$ .

### **Competency**

There was a significant effect of developmental status on participants perceptions of the children's competency,  $F(1,52) = 13.259$ ,  $p = 0.001$ ,  $\eta^2 = 0.203$ . When participants scored the typically developing children they perceived their competency to be higher, than the children with ASC. However, there was no significant effect of disclosure on participants perceptions of the children's competency,  $F(1,52) = 3.571$ ,  $p = 0.064$ ,  $\eta^2 = 0.0650$ . In regards the interaction, there was a significant interaction between the children's developmental status and disclosure of their developmental status when participants were rating the children's competency,  $F(1,52) = 96.719$ ,  $p < 0.001$ ,  $\eta^2 = 0.650$ . To explore the interaction paired samples  $t$ -tests were conducted, applying Bonferroni correction (0.025). The paired samples  $t$ -test identified a significant difference in regards to the children with ASC and the disclosure and non-disclosure of the developmental status,  $t(53) = 7.447$ ,  $p < 0.001$ . When the developmental status of the children with ASC was disclosed to the participants they were perceived as more competent. The paired samples  $t$ -test also identified a significant difference in regards to the typically developing children and the disclosure and non-disclosure of the developmental status,  $t(52) = -8.527$ ,  $p < 0.001$ . When the developmental status of the typically developing children was disclosed to the participants they were perceived as less competent.

To explore the relationship between the Societal Attitudes towards Autism scale scores ( $M = 152.91$   $SD = 18.717$ ) and the disclosure of ASC in regards to the child's perceived competency ( $M = 10.80$   $SD = 2.201$ ), Pearson's correlation revealed a

significant relationship,  $r = 0.394$ ,  $p = 0.003$ ,  $n = 54$ . When scoring the child with the knowledge of the ASC, results indicate a positive correlation between the competency score and the Societal Attitudes towards Autism scale scores. However, there was no significant linear relationship between the Societal Attitudes towards Autism scale scores ( $M = 152.91$   $SD = 18.717$ ) and the non-disclosure of ASC in regards to the child's perceived competency ( $M = 7.72$   $SD = 2.638$ ),  $r = -0.047$ ,  $p = 0.737$ ,  $n = 54$ .

### **Accuracy**

There was a significant effect of developmental status on participants perceptions of the children's accuracy,  $F(1,52) = 47.572$ ,  $p < 0.001$ ,  $\eta^2 = 0.478$ . When participants scored the typically developing children they perceived their accuracy to be higher, than the children with ASC. There was also a significant effect of disclosure on participants perceptions of the children's accuracy,  $F(1,52) = 5.762$ ,  $p = 0.020$ ,  $\eta^2 = 0.100$ . Participants scored the children whose developmental status was not disclosed as being more accurate than the children whose developmental status was disclosed. There was a significant interaction between the children's developmental status and disclosure of their developmental status when participants were rating the children's accuracy,  $F(1,52) = 117.432$ ,  $p < 0.001$ ,  $\eta^2 = 0.693$ . To explore the interaction paired samples  $t$ -tests were conducted, applying Bonferroni correction (0.025). The paired samples  $t$ -test identified a significant difference in regards to the children with ASC and the disclosure and non-disclosure of the developmental status,  $t(53) = 8.234$ ,  $p < 0.001$ . When the developmental status of the children with ASC was disclosed to the participants they were perceived as more accurate. The paired samples  $t$ -test also identified a significant difference in regards to the typically developing children and the disclosure and non-disclosure of the developmental status,  $t(52) = -8.836$ ,  $p < 0.001$ . When the

developmental status of the typically developing children was disclosed to the participants they were perceived as less accurate.

To explore the relationship between the Societal Attitudes towards Autism scale scores ( $M = 152.91$   $SD = 18.717$ ) and the disclosure of ASC in regards to the child's perceived accuracy ( $M = 9.74$   $SD = 2.571$ ), Pearson's correlation revealed there was no significant relationship,  $r = 0.187$ ,  $p = 0.175$ ,  $n = 54$ . Also, there was no significant linear relationship between the Societal Attitudes towards Autism scale scores ( $M = 152.91$   $SD = 18.717$ ) and the non-disclosure of ASC in regards to the child's perceived accuracy ( $M = 6.17$   $SD = 2.597$ ),  $r = 0.088$ ,  $p = 0.525$ ,  $n = 54$ .

### **Believability**

There was a significant effect of developmental status on participants perceptions of the children's believability,  $F(1,52) = 42.447$ ,  $p < 0.001$ ,  $\eta^2 = 0.449$ . When participants scored the typically developing children they perceived their believability to be greater, than the children with ASC. However, there was no significant effect of disclosure on participants perceptions of the children's believability,  $F(1,52) = 1.129$ ,  $p = 0.293$ ,  $\eta^2 = 0.021$ . There was also a significant interaction between the children's developmental status and disclosure of their developmental status when participants were rating the children's believability,  $F(1,52) = 63.259$ ,  $p < 0.001$ ,  $\eta^2 = 0.549$ . To explore the interaction paired samples  $t$ -tests were conducted, applying Bonferroni correction (0.025). The paired samples  $t$ -test identified a significant difference in regards to the children with ASC and the disclosure and non-disclosure of the developmental status,  $t(53) = 7.351$ ,  $p < 0.001$ . When the developmental status of the children with ASC was disclosed to the participants they were perceived as more believable. The paired samples  $t$ -test also identified a significant difference in regards to the typically developing children and the



disclosure and non-disclosure of the developmental status,  $t(52) = -4.968$ ,  $p < 0.001$ . When the developmental status of the typically developing children was disclosed to the participants they were perceived as less believable.

To explore the relationship between the Societal Attitudes towards Autism scale scores ( $M = 152.91$   $SD = 18.717$ ) and the disclosure of ASC in regards to the child's perceived believability ( $M = 10.83$   $SD = 2.619$ ), Pearson's correlation revealed there was no significant relationship,  $r = 0.261$ ,  $p = 0.057$ ,  $n = 54$ . Also, there was no significant linear relationship between the Societal Attitudes towards Autism scale scores ( $M = 152.91$   $SD = 18.717$ ) and the non-disclosure of ASC in regards to the child's perceived believability ( $M = 7.74$   $SD = 2.985$ ),  $r = 0.081$ ,  $p = 0.561$ ,  $n = 54$ .

### **Honesty**

There was a significant effect of developmental status on participants perceptions of the children's honesty,  $F(1,52) = 16.888$ ,  $p < 0.001$ ,  $\eta^2 = 0.245$ . When participants scored the typically developing children they perceived their honesty to be greater, than the children with ASC. However, there was no significant effect of disclosure on participants perceptions of the children's honesty,  $F(1,52) = 3.047$ ,  $p = 0.087$ ,  $\eta^2 = 0.055$ . There was a significant interaction between the children's developmental status and disclosure of their developmental status when participants were rating the children's honesty,  $F(1,52) = 29.642$ ,  $p < 0.001$ ,  $\eta^2 = 0.363$ . To explore the interaction paired samples  $t$ -tests were conducted, applying Bonferroni correction (0.025). The paired samples  $t$ -test identified a significant difference in regards to the children with ASC and the disclosure and non-disclosure of the developmental status,  $t(53) = 5.790$ ,  $p < 0.001$ . When the developmental status of the children with ASC was disclosed to the participants they were perceived as more honest. The paired samples  $t$ -test also

identified a significant difference in regards to the typically developing children and the disclosure and non-disclosure of the developmental status,  $t(52) = -2.852$ ,  $p = 0.006$ . When the developmental status of the typically developing children was disclosed to the participants they were perceived as less honest.

To explore the relationship between the Societal Attitudes towards Autism scale scores ( $M = 152.91$   $SD = 18.717$ ) and the disclosure of ASC in regards to the child's perceived honesty ( $M = 11.74$   $SD = 1.905$ ), Pearson's correlation revealed a significant relationship,  $r = 0.312$ ,  $p = 0.022$ ,  $n = 54$ . When scoring the child with the knowledge of the ASC, results indicate a positive correlation between the honesty score and the Societal Attitudes towards Autism scale scores. However, there was no significant linear relationship between the Societal Attitudes towards Autism scale scores ( $M = 152.91$   $SD = 18.717$ ) and the non-disclosure of ASC in regards to the child's perceived honesty ( $M = 9.80$   $SD = 2.616$ ),  $r = 0.097$ ,  $p = 0.483$ ,  $n = 54$ .

## **Discussion**

### **Findings**

The aim of this research centred on whether the public; therefore potential jurors, perception of vulnerable witnesses with ASC, impacted their decision in regards to the witnesses perceived credibility. To achieve this aim, the research set out two hypotheses to test. Hypothesis one stated that there will be a significant interaction between the children's developmental status and disclosure of their developmental status on potential juror's perceptions of the vulnerable witness credibility. The research found that there was a significant interaction between the children's developmental status and disclosure of their developmental status in regards to the potential juror's perceptions of the vulnerable witness credibility, in respect to all eight identifiable characteristics. Thus, supporting hypothesis one. Hypothesis two stated that there will be a significant relationship between potential juror's scores on the Societal Attitudes towards Autism scale and the disclosure of ASC in regards to the vulnerable witnesses' perceived credibility. The research found that there was a significant relationship between the potential juror's scores on the Societal Attitudes towards Autism scale and the disclosure of ASC in regards to the vulnerable witnesses' perceived credibility, across five of the eight credibility characteristics; capability, confidence, credibility, competency, honesty. This arguably demonstrates support to hypotheses two.

### **Developmental Status and Disclosure**

Prior research recognises the difficulties individuals with intellectual disabilities, may be presented with, such as memory recall and communication, which may hinder their ability to provide natural accounts of things they may have witnessed (Milne, Clare, & Bull, 1999). This in turn then arguably presents the individual with difficulties when

further questioned in regards to these events in respect of compliance and susceptibility, leaving them additionally vulnerable within a court arena (Gudjonsson, Murphy, & Clare, 2000).

This research found that the child not identified as being typically developing was scored as having greater credibility in comparison to the child not identified as having ASC, across all eight characteristics. These findings supporting those of other studies, such as Henry, Ridley, Perry, & Crane, (2011), who found similar results when asking their potential jurors to score the perceived witness credibility across a similar eight characteristics of credibility. Their study concluded that their results occurred due to the children with intellectual disabilities being able to recall fewer details than those within their comparison group, who were typically developing children (Henry, Ridley, Perry, & Crane, 2011). However, within this study the researcher did not request that participants provide comment or explanation into why they had reached their decision in regards to the credibility of the transcripts, and therefore it could be argued that they perceived the child who they were not aware was typically developing as more credible due to a number of reasons.

The means across all eight characteristics for both disclosure and non-disclosure of the developmental statuses identifies a difference in perceived credibility also. It could be argued that these results present a significant difference in the potential juror's perceptions of the children's credibility, when not having the knowledge of their developmental status. Researchers argue that witnesses with intellectual disabilities are perceived as providing jurors with uncertainty in regards to their account due to perceiving them as being less able to deliver eyewitness accounts that are reliable, important and thorough (Brown & Lewis, 2013). Brown & Lewis, (2013) highlight the significant importance of eyewitness testimonies within court proceedings, and the crucial element they play in the success of a trial. It is suggested that any reservation a

juror has in regards to a witnesses credibility, has the potential to have substantial implications in regards to their judgement on their final conclusion (Sigler & Couch, 2002). Buck & Warren, (2009) identify that there are two key areas that encompass how a decision is reached in regards to the view of a testimony provided. The two areas identified, accuracy and truthfulness (Buck & Warren, 2009), were incorporated into the 8 characteristics of credibility, utilised within this study. Interestingly the child whose developmental status of ASC wasn't disclosed, was rated as being less accurate and truthful in comparison to both children who were typically developing whether their developmental status was disclosed or not, in seven of the eight credibility characteristics identified. Arguably, these results support prior research in its view that the jurors perceptions indicate they perceive witnesses with ASC overall as less able to deliver a consistent account (Westcott & Jones, 1999). Additionally it would suggest that despite the disclosure or non-disclosure of the ASC, potential jurors still perceived the typically developing child as more credible.

It is well known that individuals with ASC can have numerous potential difficulties in regards to their memory, which consequently impacts the manner in which they perceive, recognise and deduce things around them (Maras & Bowler, 2014). Though areas of memory such as recognition (Bowler, Gaigg, & Gardiner, 2008) and cued recall (Bennetto, Pennington, & Rogers, 1996) are identified as areas that are largely unaffected by ASC, areas of memory such as recalling situations in which they have had personal experiences are documented as being likely to have been impacted by the ASC (Bowler, Gardiner, & Gaigg, 2007). Therefore due to these impairments it could be suggested that if an individual with ASC is required to recall events in relation to a crime which they have either been a witness, victim, or perpetrator to, they may find it problematic in regards to recalling the events from their memory (Maras & Bowler, 2014).

Despite these findings and those within this study, previous studies have identified that witnesses with an intellectual disability are able to recall a similar amount and accuracy of information as individuals identified as typically developing (Maras & Bowler, 2014). A number of studies have recognised that in some instances individuals with ASC are not able to freely recall as much information as their typically developing comparison group, but were however no less correct with the information they recalled (Bruck, London, Landa, & Goodman, 2007; McCrory, Henry, & Happe, 2007). The transcripts utilised within this study were evaluated in their original research for accuracy between the two developmental groups, finding that the level of accuracy of the information recalled between both groups was consistent (Mattison, Dando, & Ormerod, 2015; 2016). Interestingly, despite this fact, participants in this research still perceived a difference in the accuracy between both developmental groups, identifying the typically developing child as being overall more accurate than the children with ASC. Furthermore, within this research participants did not view and were provided with little information in regards to the original video watched by the children. Therefore this suggests that the participants reached their conclusion on the children's accuracy, purely through the discussion documented in the transcripts, and did not take into account the fact that they didn't actually have the knowledge of the incident themselves as a comparison in regards to the accuracy of the facts recalled by the children.

Interestingly this research did identify that on disclosing the developmental status of the child with ASC, the potential jurors scored the child as having greater credibility across all eight characteristics in comparison to the child identified as being typically developing. These findings contradict those of other research by the likes of Stobbs & Kebbell, (2003), and Peled, Iarocci, & Connolly, (2004), in which both studies found the witness with an intellectual disabilities was identified as being less credible overall. The findings within this study arguably could have occurred due to a number of reasons.

The potential jurors who took part, merely could have interpreted that the child identified with ASC as being more credible across the eight characteristics in comparison to the child identified as typically developing. This would support the findings of McCrory, Henry, & Happe, (2007) who despite finding that the children with ASC were able to recall less information than the typically developing comparison group, they were no less accurate. The number of individuals who disclosed that they had experiences of ASC, this being just under half (21 out of 54), may hold positive perceptions in regards to an individual with ASCs credibility. This in turn may have encouraged participants to hold a positive bias in regards to the child with ASC, wanting them to be identified in a positive manner. Similarly, Nevill & White, (2011) found in their study with college students that those with familial experiences of ASC, demonstrated an increased positive perception of interaction with ASC, in comparison to those who had not had such experiences.

Prior research has additionally recognised that the identification of an individual having ASC can additionally support an increased positive perception of the individual, and promote any potential discrimination or destructive attitudes being dismissed (Chambres, Auxiette, Vansingle, & Gil, 2008). As with Chambres, Auxiette, Vansingle, & Gil, (2008) study, it could be suggested that a similar effect has occurred within this study, with participants having the knowledge that the child had ASC, they may have been inspired to exclude any previous biases or stigma they may hold, and have interpreted the credibility of the vulnerable witness with ASC in a more open minded way. However previous research examining whether the identification of an individual having ASC would contribute to the reduction of negative perceptions, did in fact find that it didn't matter whether the diagnosis of ASC was identified as the negative perceptions continued to prevail (Swaim & Morgan, 2001).

Despite numerous studies recognising biases and negative stereotypes held about individuals with ASC (Farrugia, 2009), legislation and policy continue to support

the opinion that these views need to change in a variety of settings (See Equality Act, (2010), and Achieving Best Evidence in Criminal: Guidance on interviewing victims and witnesses, and guidance on using special measures, (2011)). Therefore it could be suggested that the outlook within society in regards to ASC, is recognising a positive need for change. This outlook could suggest that participants of this research interrupt this positive need for change, as requiring them to report more positively towards those that are deemed vulnerable within society.

Tracey, (2016) highlights, numerous definitions are provided for the term socially desirable responses, however the term universally is recognised as an occurrence that takes place that involves an individual having to be motivated to take part in something, which may contribute to inaccurate outputs and consequences due to the contact between the individual and the occurrence taking place (Ziegler & Buehner, 2009). It could be suggested that due to the knowledge of the developmental status of ASC, that participants felt a need to provide what they assumed to be socially desirable answers, despite the possibility that the answers they provided do not reflect their true perceptions of the credibility of the child identified as having ASC. This view may then also support the results highlighting that the potential jurors identified the typically developing child as having a greater level of credibility when the developmental status was not disclosed.

In addition, it could also be argued that demand characteristics occurred during the completion of the study for the potential jurors (Orne, 2002). This approach would argue that the potential jurors foresaw what the researcher was examining in the study, and therefore led to a modification of their true behaviour, in the view of wanting to meet their perceived expectations (Orne, 2002). Researchers would argue that from this perspective, that participating in research will continuously encourage risk, purely due to an individual's participation providing purpose; despite a study having little or no relevance to the participants, either due to an attempt to design a study in a manner



which endeavours to prevent biasing effects or due to their pure lack of interest (Laney, et al., 2008).

### **Interaction of developmental status and disclosure**

Across seven of the eight credibility characteristics, the developmental status of the vulnerable witness was identified as having a significant effect on the potential juror's perceptions. The results highlighted that across the seven characteristics; truthfulness, confidence, credibility, competency, accuracy, believability, and honesty, the potential jurors valued the typically developing children to have a greater ability in the seven characteristics than the children with ASC. These results could lend support to prior research that has examined juror's perceptions of vulnerable witness's credibility (Henry, Ridley, Perry, & Crane, 2011), highlighting that overall the typically developing child was seen as more able within the seven characteristics in comparison to the child with ASC. It could be suggested that the effect recognised in regards to the developmental status may be due to a number of factors. Previous research would suggest that prior stereotypes and biases held by the potential jurors who took part, have the potential to consciously or subconsciously impede on their perceptions, despite the standard of evidence base provided (Peled, Iarocci, & Connolly, 2004). The culture in which the potential juror identifies themselves within, may additionally have contributed to the effect, as the potential jurors perceptions will be shaped through mutual attitudes and beliefs with those that they recognise as within their group (Matsumoto, 2001). As Gurung, (2006) highlights, this is not to say that individuals perceptions within a particular culture may adapt and alter over time, but the stem of their beliefs and attitudes will likely to have been shaped and influenced by the views and outlooks of others within the same culture.

One of the underlying aims of this study was to assist in the eradication of potentially damaging stereotypes and biases against those with ASC. Several theories exist in which researchers suggest that implicating these theories into practice, can positively assist in the eradication of discrimination towards individuals with disabilities (Thornicroft, Rose, Kassam, & Sartorius, 2007). It could be suggested that this research has adapted persuasive communication theory. Persuasive communication overall aims to influence attitude, and trigger behavioural change (Campbell, 2006). This research, aimed to assist in the eradication of social prejudices. It arguably could have achieved this aim by providing participants opportunity to identify potential prejudices they may hold when completing the study. It could be suggested that it has achieved this by providing a *who, what, how and whom* arena for participants to consider their core beliefs and attitudes (Pornpitakpan, 2004). Within this study participants may have not perceived their beliefs or views as forming potential biases or stereotypes towards one or the other developmental status, however it does clearly highlight that whether these were positive or negative, the typically developing children were viewed as more credible overall. This being despite literature identifying the potential accuracy children with intellectual disabilities have to recall information at a good standard (Agnew & Powell, 2004).

Interestingly the results highlighted that there was no significant effect of the developmental status on the potential juror's perceptions of the vulnerable witness's capability. The interpretation of the null effect could be interpreted in a positive or negative manner. The definition of capability states it is "the power or ability to do something" (Oxford University Press, 2017), which could suggest that the potential jurors foresaw the vulnerable witness as having or not having the 'ability' to recall the events which they had watched. It could also be suggested with this characteristic of credibility, the age of the child was taken into account greater than their developmental status;

despite an exact age not being provided to the potential jurors. Jurors are believed to take numerous aspects of the witness's characteristics into account when considering their credibility (Pozzulo & Dempsey, 2009). The age of a witness has been identified as an influential characteristic in regards to their perception of the individuals' believability (Goodman & Schaaf, 1997). Nikonova & Ogloff, (2005) highlighted in their study that juror's perceptions towards younger children are less favourable than those of older children or adults, in their ability to recall believable information. Though no age was specified within this study in regards to the four child witnesses, it could be argued that through the language and sentence structure utilised, the potential jurors formed an impression on the age of the child. If they believed the children to be of similar age, then this may have influenced their perception on all of the children's abilities to recount the events to be similar.

In regards to the effect of the disclosure status on the potential jurors perceptions of the vulnerable witnesses credibility, this study revealed that there was a significant effect for three of the eight credibility characteristics; capability, confidence, accuracy. This study's findings could suggest that the actual disclosure of a vulnerable witness's developmental status has little overall effect on the juror's perceptions of the vulnerable witness's credibility. This being due to the disclosure status having no effect on the majority of the eight credibility characteristics; truthfulness, credibility, competency, believability, honesty. Chambres, Auxiette, Vansingle, & Gil, (2008) findings would not offer support to this research as they found within their study that the disclosure of the diagnosis compelled individuals to assess the child in a different method than they would a typically developing child.

Despite this study's findings, a prior policing report would suggest that the identification of a disclosure or non-disclosure of a vulnerable witness's diagnosis could potentially have a significant impact on them and the wider criminal justice system

(Adebowale, 2013). Crane, Maras, Hawken, Mulcahy, & Memon (2016) highlight the significant importance disclosure of a diagnosis plays in cases where the victimisation has been specially targeted due to their vulnerabilities brought about by their ASC. Parents and adults with ASC, who took part in their study recognised the important implications disclosing their ASC had in regards to the support and assistance they received when being questioned by the Police (Crane L. , Maras, Hawken, Mulcahy, & Memon, 2016). The participants of their study additionally recognised the importance the disclosure may have in regards to providing explanation and understanding to specific behaviours and reactions themselves or their children with ASC may have when placed in a new or anxious situation (Crane L. , Maras, Hawken, Mulcahy, & Memon, 2016). However, despite Crane, Maras, Hawken, Mulcahy, & Memon, (2016) study identifying the importance of the disclosure in regards to the support and understanding the Police provide to individuals with ASC, it additionally worryingly highlighted that the adults with ASC and parents of children with ASC, also demonstrated grave concerns in regards to themselves or their children being discriminated against because of their disclosure. More worryingly it identified a concern that participants perceived their evidence would be viewed as less valuable (Crane L. , Maras, Hawken, Mulcahy, & Memon, 2016).

Within this research the three areas in which a significant effect was seen; capability, confidence, accuracy, could be characteristics that may be impaired when portrayed to others due to behaviours demonstrated that may be associated with an ASC diagnosis. Literature has highlighted on numerous occasions, perceptions that can potentially be formed due to an individual's behaviours associated with ASC (Harnum, Duffy, & Ferguson, 2007). Researchers have argued that difficulties with social skills that may be experienced by those who have ASC, are generally recognisable in everyday life (Sigman & Ruskin, 1999). Behaviours that are identified by members of the public as not socially acceptable performed by those with ASC, can tactlessly lead to stereotypes and

biases being formed (Gray D. E., 2002). The areas identified in this research; capability, confidence, accuracy, could arguably be suggested as ones that may have been disadvantaged due to potential communication difficulties experienced, as well as an understanding in regards to social cues (Williams White, Keonig, & Scahill, 2007).

The results of this study, indicate that with the majority of characteristics there is no effect in regards to disclosure status, which could be potentially seen as a positive outcome for this research. It could be suggested that by having a majority of no effect, the potential jurors judged their perception of all four children on an equal basis despite whether they were identified as having ASC or being typically developing. This could suggest that participants didn't allow potential stereotypes or biases they may have previously held impact their overall decision in regards to the children's overall credibility. This suggestion would disagree with previous research that has examined the effect of anchoring, in which individuals generate a conclusion on two judgements utilising a specific standard and a comparison (Chambres, Auxiette, Vansingle, & Gil, 2008; Mussweiler & Strack, 2000).

In regards to interaction between the disclosure and developmental status, this research found that all eight characteristics of credibility were identifying a significant interaction. This led to the researcher applying a Bonferroni correction to the *t*-tests ran so to further scrutinise the interaction. The findings of the research identified that a significant difference was found in regards to disclosure status and non-disclosure of both developmental statuses across all eight characteristics. The results identify that ultimately the disclosure and non-disclosure of a developmental status, does equate to a significant difference in regards to how the potential jurors perceive the vulnerable witnesses credibility. Interestingly this would suggest that in fact the knowledge of whether a child does or does not have a diagnosis, in this case ASC, does impact a potential jurors decision as to their credibility.

The results would suggest the knowledge of the diagnosis of ASC, supported the potential jurors to be more favourable in their decision of credibility in regards to the child. This research highlights that their views are clearly impacted by the knowledge of the diagnosis. As the research has previously highlighted, individuals are vulnerable to become victims of crime, with their vulnerability due to their diagnosis playing an essential part (Helverschou, et al., 2015). It could be suggested however within this study that the knowledge of the diagnosis in essence is a protective factor as to how they are viewed, and even more so supports them to be viewed more positively. Arguably, this could be seen to have been caused by a number of factors. The foundations of the positive views could potentially be based on a high proportion of participants having previous experiences of ASC, and therefore these experiences if positive, could potentially have supported the participant's perceptions in a positive manner. Additionally, due to a number of participants identifying that their experiences have been based through employment, it could be suggested that a proportion of participants are employed in positions where they are required to be person centred. Arguably, if in a position such as this, these participants will have had training and experience in treating individuals as unique human beings, whom have individual worth, ability and importance (Low, 2017). This approach would have eradicated any potential biases, stigmas or stereotypes the potential jurors hold, and would enable them to see the individual for their unique qualities and capacity (Christie & Camp, 2014). It would additionally eradicate any potential suggestions that the vulnerable witness's truthfulness and honesty is based on their developmental status. Though this study has identified a positive perception based on credibility of vulnerable witness's ability to recall events, the case still remains that not all research of this sort supports this view (Stobbs & Kebbell, 2003).

Despite this positive discovery, the results still recognise that when the knowledge of diagnosis is not known the typically developing child is seen as having a greater level of credibility. This arguably could be due to their unhindered ability in the manner in which they convey the information they have witnessed, as well as their ability in processing and memorising information (McCrory, Henry, & Happe, 2007). The results highlighted a significant difference in regards to the disclosure status of the children who were typically developing. Arguably, it could be suggested that in fact these results uncover the potential juror's true and uninfluenced views and feelings due to not having the knowledge of a developmental status, and therefore not being able to form opinions or allow their judgements to be the foundations of their decisions. Despite literature identifying that children with ASC, have the ability to recall precise information (Agnew & Powell, 2004), there is still a wide evidence base that would argue that communication and social deficits may indeed hinder their ability to provide evidence at the same standard as children who are typically developing (Maras & Bowler, 2014).

### **Societal Attitudes towards Autism scale and the disclosure status of ASC**

The Societal Attitudes towards Autism scale utilised within this study was adapted from the original scale introduced by Flood, Bulgrin, & Morgan, (2013), who found their scale to demonstrate internal consistency and construct validity. Flood, Bulgrin, & Morgan, (2013) concluded that their scale identified that attitudes formulated towards ASC do have a relationship with attitudes towards disabilities, despite their differences (Flood, Bulgrin, & Morgan, 2013). The original scale has also been recognised as the only one of its kind to specifically measure attitudes towards ASC (Dachez, Ndobbo, & Ameline, 2015).

To examine any inherent relationship between both the potential juror's attitudes towards autism scores and their perceptions of the children with ASC's credibility, correlation was necessary to discover whether a relationship was present or not. Interestingly, it was discovered that there was no relationship uncovered in regards to the non-disclosure of ASC and the scores from the Societal Attitudes towards Autism scale, across all eight credibility characteristics. This would suggest that there was no direct link between the scores on the Societal Attitudes towards Autism scale and how the participants viewed the child whose developmental status of ASC was not disclosed. The lack of relationship could be argued as occurring due to participants being influenced through the lack of knowledge that the child they were indeed scoring has ASC, and therefore previous perceptions in regards to their view of an individual with ASC could not influence their perception. Due to this study being the first designed in this manner; where participants are requested to complete the Societal Attitudes towards Autism Scale and then identify their perceptions of children whose developmental statuses were not all disclosed, there is no prior evidence to compare the findings with.

However, the findings also revealed that there was a significant linear relationship discovered between the disclosure of the ASC and the Societal Attitudes towards Autism scale scores, across five of the eight credibility characteristics; capability, confidence, credibility, competency, honesty. The findings could suggest that there is a link between how the potential jurors saw individuals with ASC overall, represented in the Societal Attitudes towards Autism scale scores, and how they viewed the child with ASC's overall credibility. The positive relationship overall could be suggested as having occurred due to the potential jurors providing socially desirable responses. It is suggested that many scales measuring attitudes (Flood, Bulgrin, & Morgan, 2013), as well as attitudes towards individuals with a disability (Hergenrather & Rhodes, 2007), have the potential to be influenced and effected by what participants perceive to be socially acceptable. The



presence of equal opportunities in recent legislation and policy also has the potential to highlight to those with previous discriminatory and oppressive views, that negative and prejudiced perceptions towards those with autism are not acceptable attitudes within United Kingdom society (Equality Act, 2010). Attitudes have been documented as playing a crucial part in ensuring positive inclusion and preventing social rejection of those with ASC (Humphry, 2008). Some researchers argue that these negative attitudes towards disabilities or disorders potentially stem from an individuals' own concerns in relation to their own disabilities or disorders, self-concept and capability, as well as their public awareness (All, Fried, Roberto, Shaw, & Richter, 1997). Arguably on completion of the Societal Attitudes towards Autism scale, participants are aware that they are directly answering questions in regards to an individual with Autism. As Chambres, Auxiette, Vansingle, & Gil, (2008) found in their study, individuals can apply a differing level of comparison to evaluation on having the knowledge that the child has a diagnosis. It could be suggested knowing that the questions were directly linked to individuals with ASC, that participants interpreted their expectations and wishes to a differing standard than another group of individuals identifiable in society (Mussweiler & Strack, 2000). This in turn promoting the positive correlation between both their perceptions of a child's credibility who they know has ASC and their overall view of individual's capabilities and rights.

## **Limitations**

Some of the potential limitations of this study have previously been identified within the discussion. This study has focused on an arguably sensitive subject matter, which has the potential to be a passionate subject for some of the potential jurors that took part. A subject matter of this type is a potentially difficult one for researchers to accurately record individual's true perceptions, due to participant's feelings towards what

is seen as socially acceptable (Tracey, 2016). The effects of this may have discouraged participants to document their true perceptions.

Furthermore, this research did not request that participants provide further explanation for their reasoning behind their perceptions of the children's credibility. Arguably, if it had done so as other research has (Henry, Ridley, Perry, & Crane, 2011), further insight may have been provided into why the potential jurors reached the decisions that they did. Interestingly, this would have allowed for participants to confirm whether their attitudes and perceptions are influenced based on previous experiences of ASC, or due to the role that they are in.

Due to recruitment of participants being sought only through the researchers social media account, it could be suggested a significant proportion of the participants have experience within a health and social care background. This potentially could have positively influenced the potential juror's perceptions due to codes of practice they may be obliged to follow. Future studies would benefit from an alternative recruitment method; such as community advertisement, so to acquire a more diverse proportion of society.

Furthermore, it must be highlighted that the potential jurors within this study reached their decisions on the children's credibility across all eight characteristics based solely on reading the transcripts provided. Though researchers and legal scholars argue that jurors are well-informed decision makers (Cecil, Hans, & Wiggins, 1991), who are precise and effective at discovering the facts of a case (Cooper, Bennett, & Sukeel, 1996). Many would argue that in fact juror's take more than what they perceive as the facts into account when reaching their decisions (Pozzulo & Dempsey, 2009). The transcripts utilised within this research, don't allow the potential jurors to view a number of factors that may have potentially influenced their decisions in regards to the credibility of the child witnesses. Potential communication difficulties, gender, emotional reaction, body language and appearance, are all characteristics arguably having the potential to

influence a jurors decisions (Nikonova & Ogloff, 2005), and were not visible within the transcripts utilised within this study. The manner in which an individual presents themselves within a court room, has the potential to trigger an emotional reaction within a juror (Nadler & Rose, 2003). If a child becomes upset or distressed when recalling events of a brutal crime against themselves or someone close to them, their emotional distress is viewed by a jury (Cooper, Quas, & Cleveland, 2014). Furthermore, if a witness doesn't present themselves in a manner that meets a jurors expectations on the basis of cultural, societal, and personal expectations, this too can influence the juror's perceptions of the credibility of the witness (Castelli & Goodman, 2014). Therefore it could be suggested that if the potential jurors were asked to watch the discussion between the interviewer and the children, the potential juror's position on the children's credibility arguably could be altered. Future research may benefit by enabling participants to observe vulnerable witnesses recalling events, so to further examine whether presentation and appearance effects the vulnerable witnesses perceived credibility.

Arguably, this research does however show strength in the fact that the transcripts utilised within this study, are in fact real, and have involved a research group identified as being "hard to reach" (Sadler, Lee, Lim, & Fullerton, 2010). Utilising the children's transcripts within this research in comparison to transcripts made up by the researcher, provides recognition also that children are different to adults in so many aspects. Therefore using false transcripts composed by the researcher would have impacted the validity of this research, in the fact that an adult would never fully be able to recount what it is like to be in a child's world within a specific situation, as an adult will never really be a child again (Hill, 1997).

## **Conclusion**

The aim of this study was to examine whether the perceptions held by potential jurors, in regards to children with ASC, impacted their perceptions of the vulnerable witnesses credibility. This study found that there was a significant interaction between the children's developmental status and disclosure of their developmental status in regards to the potential juror's perceptions of the vulnerable witness's credibility, in respect to all eight identifiable characteristics. It is suggested that when the potential jurors had the knowledge of the child's developmental status, they may have utilised differing standards of comparison in which to formulate their opinion on the children's credibility (Chambres, Auxiette, Vansingle, & Gil, 2008). Additionally it has been noted that, socially desirable responses may have influenced the potential juror's perceptions, when they were made aware of the children's developmental status (Ziegler & Buehner, 2009). Furthermore, this study found that there was a significant relationship between the potential juror's scores on the Societal Attitudes towards Autism scale and the disclosure of ASC in regards to the vulnerable witnesses' perceived credibility, across five of the eight credibility characteristics. This finding potentially suggests that there was a link between the potential jurors overall attitudes towards ASC and their perceptions of credibility in regards to the child identified as having ASC. Though in reality potential jurors may not be informed of a witnesses diagnosis (Henry, Ridley, Perry, & Crane, 2011), this research did positively identify that when having the knowledge of the child's developmental status, the jurors perceptions positively supported the child who has ASC.

## References

- Adebowale, V. (2013). *The independent commission on mental health and policing report*. London: Independent Commission on Mental Health and Policing.
- Agnew, S. E., & Powell, M. B. (2004). The effect of intellectual disability on children's recall of an event across different question types. *Law and Human Behavior*, 28(3), 273-294. doi:10.1023/B:LAHU.0000029139.38127.61
- Agnew, S. E., Powell, M. B., & Snow, P. C. (2006). An examination of the questioning styles of police officers and caregivers when interviewing children with intellectual disabilities. *Legal and Criminological Psychology*, 11(1), 35-53. doi:10.1348/135532505X68494
- All, A., Fried, J., Roberto, K., Shaw, D., & Richter, J. (1997). The effects of HIV/AIDS education on the anxiety of rehabilitation workers. *Journal of Rehabilitation*, 63(4), 45-51.
- Arvaniti, A., Samakouri, M., Kalamara, E., Bochtsou, V., Bikos, C., & Livaditis, M. (2009). Health service staff's attitudes towards patients with mental illness. *Social Psychiatry and Psychiatric Epidemiology*, 44(8), 658-665. doi:10.1007/s00127-008-0481-3
- Austin, E. J. (2005). Personality correlates of the broader autism phenotype as assessed by the Autism Spectrum Quotient (AQ). *Personality and Individual Differences*, 38(2), 451-460.
- Autism West Midlands. (2015). *Autism and the criminal justice system: Advice and guidance for professionals*. Retrieved from Autism West Midlands: [http://www.autismwestmidlands.org.uk/upload/pdf\\_files/](http://www.autismwestmidlands.org.uk/upload/pdf_files/)

- Baldwin, S., Costley, D., & Warren, A. (2014). Employment activities and experiences of adults with high-functioning autism and Asperger's disorder. *Journal of Autism and Developmental Disorders*, 44(10), 2440-2449.
- Barnett, M., Brodsky, S., & Price, J. (2007). Differential impact of mitigating evidence in capital case sentencing. *Journal of Forensic Psychology Practice*, 7(1), 39-46.
- Bennett, K. D., & Dukes, C. (2013). Employment instruction for secondary students with autism spectrum disorder: A systematic review of the literature. *Education and Training in Autism and Developmental Disabilities*, 48(1), 67-75.
- Bennetto, L., Pennington, B. F., & Rogers, S. J. (1996). Intact and impaired memory functions in autism. *Child Development*, 67(4), 1816-1835. doi:10.1111/j.1467-8624.1996.tb01830.x
- Berliner, L., & Barbieri, M. K. (1984). The testimony of the child victim of sexual assault. *Journal of Social Issues*, 40(2), 125-137. doi:10.1111/j.1540-4560.1984.tb01097.x
- Berman, G. L., & Cutler, B. L. (1996). Effects of inconsistencies in eyewitness testimony on mock-juror decision making. *Journal of Applied Psychology*, 81(2), 170-177. doi:10.1037/0021-9010.81.2.170
- Bigler, R. S., Jones, L. C., & Lobliner, D. B. (1997). Social categorisation and the formulation of intergroup attitudes in children. *Child Development*, 68(3), 530-543.
- Boshoff, K., Gibbs, D., Phillips, R. L., Wiles, L., & Porter, L. (2016). Parents' voices: 'why and how we advocate'. A meta-synthesis of parents' experiences of advocating for their child with autism spectrum disorder. *Child: Care, Health and Development*, 42(6), 784-797. doi:10.1111/cch.12383

Bowler, D. M., Gaigg, S. B., & Gardiner, J. M. (2008). Effects of related and unrelated context on recall and recognition by adults with high-functioning autism spectrum disorder. *Neuropsychologia*, 46(4), 993-999.

doi:10.1016/j.neuropsychologia.2007.12.004

Bowler, D., Gardiner, J., & Gaigg, S. (2007). Factors affecting conscious awareness in the recollective experience of adults with asperger's syndrome. *Consciousness and Cognition*, 16(1), 124-143. doi:10.1016/j.concog.2005.12.001

British Government . (2010). *The Equality Act*. London: HMSO.

Brown, D., & Lewis, C. (2013). Competence is in the eye of the beholder: Perceptions of intellectually disabled child witnesses. *International Journal of Disability Development and Education*, 60(1), 3-17. doi:10.1080/1034912X.2013.757132

Bruck, M., London, K., Landa, R., & Goodman, J. (2007). Autobiographical memory and suggestibility in children with autism spectrum disorder. *Development and Psychopathology*, 19(1), 73-95. doi:10.1017/S0954579407070058

Buck, J. A., & Warren, A. R. (2009). Jurors and professionals in the legal system: What do they know and what they should know about interviewing child witnesses. In K. Kuehnle, & M. Connell, *The evaluation of child sexual abuse allegations: A comprehensive guide to assessment and testimony* (pp. 501-530). Hoboken: John Wiley & Sons.

Campbell, J. (2006). Changing children's attitudes toward autism: A process of persuasive communication. *Journal of Developmental and Physical Disabilities*, 18(3), 251-272. doi:10.1007/s10882-006-9015-7

- Carrington, S., & Graham, L. (2001). Perceptions of school by two teenage boys with asperger syndrome and their mothers: A qualitative study. *Autism : The International Journal of Research and Practice*, 5(1), 37.
- Castelli, P., & Goodman, G. S. (2014). Children's perceived emotional behavior at disclosure and prosecutors' evaluations. *Child Abuse & Neglect*, 38(9), 1521-532. doi:10.1016/j.chiabu.2014.02.010
- Cecil, J. S., Hans, V. P., & Wiggins, E. C. (1991). Citizen comprehension of difficult issues: Lessons from civil jury trials. *American University Law Review*, 40(2), 727-774.
- Chambres, P., Auxiette, C., Vansingle, C., & Gil, S. (2008). Adult attitudes toward behaviors of a six-year-old boy with autism. *Journal of Autism and Developmental Disorders*, 38(7), 1320-1327.
- Cheak-Zamora, N. C., & Farmer, J. E. (2015). The impact of the medical home on access to care for children with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 45(3), 636-644. doi:10.1007/s10803-014-2218-3
- Chen, J. L., Leader, G., Sung, C., & Leahy, M. (2015). Trends in employment for individuals with autism spectrum disorder: A review of the research literature. *Review Journal of Autism and Developmental Disorders*, 2(2), 115-127.
- Christie, J., & Camp, J. (2014). Critical reflection on the process of validation of a framework for person-centred practice. *International Practice Development Journal*, 4(2), 1-11.
- Citizens Information Board. (2017, July 15th). *Role of the jury*. Retrieved from Citizens Information: <http://www.citizensinformation.ie/en/justice/courtroom/jury.html>



- Clare, I., & Murphy, G. (2001). Witnesses with learning disabilities. *British Journal of Learning Disabilities*, 29(3), 79-80. doi:10.1046/j.1354-4187.2001.00156.x
- Collins, K., Harker, N., & Antonopoulos, G. A. (2017). The impact of the registered intermediary on adults' perceptions of child witnesses: Evidence from a mock cross examination. *European Journal on Criminal Policy and Research*, 23(2), 211-225. doi:10.1007/s10610-016-9314-1
- Cooper, A., Quas, J. A., & Cleveland, K. C. (2014). The emotional child witness: Effects on juror Decision-making. *Behavioral Sciences & the Law*, 32(6), 813-828. doi:10.1002/bsl.2153
- Cooper, J., Bennett, E. A., & Sukel, H. L. (1996). Complex scientific testimony: How do jurors make decisions? . *Law and Human Behavior*, 20(4), 379-394. doi:10.1007/BF01498976
- Corrigan , P., Markowitz, F. E., Watson, A., Rowan, D., & Kubiak, M. A. (2003). An Attribution Model of Public Discrimination Towards Persons with Mental Illness. *Journal of Health and Social Behavior*, 44(2), 162-179.
- Cossins, A. (2006). Prosecuting child sexual assault cases: Are vulnerable witness protections enough? *Current Issues in Criminal Justice*, 18(2), 299-317.
- Crane, L., Chester, J. W., Goddard, L., Henry, L. A., & Hill, E. (2016). Experiences of autism diagnosis: A survey of over 1000 parents in the united kingdom. *Autism*, 20(2), 153-162. doi:10.1177/1362361315573636
- Crane, L., Maras, K. L., Hawken, T., Mulcahy, S., & Memon, A. (2016). Experiences of autism spectrum disorder and policing in england and wales: Surveying police and the autism community. *Journal of Autism and Developmental Disorders*, 46(6), 2028-2041. doi:10.1007/s10803-016-2729-1

- Crown Prosecution Service. (2004). *Special Measures*. Retrieved from Crown Prosecution Service: [http://www.cps.gov.uk/legal/s\\_to\\_u/special\\_measures/](http://www.cps.gov.uk/legal/s_to_u/special_measures/)
- Crown Prosecution Service. (2004). *Youth Offenders*. Retrieved from Crown Prosecution Service: [http://www.cps.gov.uk/legal/v\\_to\\_z/youth\\_offenders/](http://www.cps.gov.uk/legal/v_to_z/youth_offenders/)
- Cummins, I. (2011). The Other Side of Silence': The role of the appropriate adult post-bradley. *Ethics and Social Welfare*, 5(3), 306-312.
- Dachez, J., Ndobu, A., & Ameline, A. (2015). French validation of the multidimensional attitude scale toward persons with disabilities (MAS): The case of attitudes toward autism and their moderating factors. *Journal of Autism and Developmental Disorders*, 45(8), 2508-2518. doi:10.1007/s10803-015-2417-6
- Davis, P., & Florian, L. (2004). *Teaching Strategies and Approaches for Pupils with Special Educational Needs: A Scoping Study. Research Report RR516*. Nottingham: DfES Publications.
- Department for Education and Skills. (2004). *Removing Barriers to Achievement*. Nottingham: DfES Publications.
- Department of Health. (2000). *No Secrets, guidance on developing and implementing multi-agency policies and procedures to protect vulnerable adults from abuse*. London: Department of Health.
- Department of Health. (2001). *Valuing People: A New Strategy for Learning Disability for the 21st Century*. London: Department of Health.
- Dillenburger, K., McKerr, L., Jordan, J. A., Devine, P., & Keenan, M. (2015). Creating an inclusive society... how close are we in relation to autism spectrum disorder? A general population survey. *Journal of Applied Research in Intellectual Disabilities*, 28(4), 330-340.

- Eaton, T. E., Ball, P. J., & O'Callaghan, M. G. (2001). Child-Witness and defendant credibility: Child evidence presentation mode and judicial instructions. *Journal of Applied Social Psychology*, 31(9), 1845-1858. doi:10.1111/j.1559-1816.2001.tb00207.x
- Farrugia, D. (2009). Exploring stigma: Medical knowledge and the stigmatisation of parents of children diagnosed with autism spectrum disorder. *Sociology of Health & Illness*, 31(7), 1011-1027.
- Filipek, P. A., Accardo, P. J., Baranek, G. T., Cook Jr, E. H., Dawson, G., Gordon, B., & Volkmar, F. R. (1999). The screening and diagnosis of autistic spectrum disorders. *Journal of Autism and Developmental Disorders*, 29(6), 439-484.
- Flood, L. N., Bulgrin, A., & Morgan, B. L. (2013). Piecing together the puzzle: development of the Societal Attitudes towards Autism (SATA) scale. *Journal of Research in Special Educational Needs*, 13(2), 121-128.
- Gabora, N. J., Spanos, N. P., & Joab, A. (1993). The effects of complainant age and expert psychological testimony in a simulated child sexual abuse trial. *Law and Human Behavior*, 17(1), 103-119. doi:10.1007/BF01044540
- Gerhardt, P. F., & Lainer, I. (2011). Addressing the needs of adolescents and adults with autism: A crisis on the horizon. *Journal of Contemporary Psychotherapy*, 41(1), 37-45.
- Goddard, L., Howlin, P., Dritschel, B., & Patel, T. (2007). Autobiographical memory and social problem-solving in asperger syndrome. *Journal of Autism and Developmental Disorders*, 37(2), 291-300. doi:10.1007/s10803-006-0168-0
- Goodman, G. S., & Schaaf, J. M. (1997). Over a decade of research on children's eyewitness testimony: What have we learned? where do we go from here?

*Applied Cognitive Psychology*, 11(7), 5-20. doi:10.1002/(SICI)1099-0720(199712)11:73.0.CO;2-C

Goodman, G. S., Golding, J. M., Helgeson, V. S., Haith, M. M., & Michelli, J. (1987).

When a child takes the stand: Jurors' perceptions of children's eyewitness testimony. *Law and Human Behavior*, 11(1), 27-40. doi:10.1007/BF01044837

Gray, D. E. (2002). 'Everybody just freezes. everybody is just embarrassed': Felt and enacted stigma among parents of children with high functioning autism. *Sociology of Health & Illness*, 24(6), 734-749.

Gray, K. M., Keating, C. M., Taffe, J. R., Brereton, A. V., Einfeld, S. L., Reardon, T. C., & Tonge, B. J. (2014). Adult outcomes in autism: Community inclusion and living skills. *Journal of Autism and Developmental Disorders*, 44(12), 3006-3015.

Gudjonsson, G. H., Murphy, G. H., & Clare, I. C. (2000). Assessing the capacity of people with intellectual disabilities to be witnesses in court. *Psychological Medicine*, 30(2), 307-314. doi:10.1017/S003329179900149X

Gurung, R. (2006). *Health psychology: A cultural approach*. Belmont: Wadsworth Publishing.

Hare, D. J., Mellor, C., & Azmi, S. (2007). Episodic memory in adults with autistic spectrum disorders: Recall for self- versus other-experienced events. *Research in Developmental Disabilities*, 28(3), 317-329. doi:10.1016/j.ridd.2006.03.003

Harnum, M., Duffy, J., & Ferguson, D. A. (2007). Adults' Versus Children's Perceptions of a Child with Autism or Attention Deficit Hyperactivity Disorder. *Journal of autism and developmental disorders*, 37(7), 1337-1343.

- Helverschou, S. B., Rasmussen, K., Steindal, K., Søndanaa, E., Nilsson, B., & Nøttestad, J. A. (2015). Offending profiles of individuals with autism spectrum disorder: A study of all individuals with autism spectrum disorder examined by the forensic psychiatric service in Norway between 2000 and 2010. *Autism*, 19(7), 850-858. doi:10.1177/1362361315584571
- Henry, L., Ridley, A., Perry, J., & Crane, L. (2011). Perceived credibility and eyewitness testimony of children with intellectual disabilities. *Journal of Intellectual Disability Research*, 55(4), 385-391. doi:10.1111/j.1365-2788.2011.01383.x
- Henshaw, M., & Thomas, S. (2012). Police encounters with people with intellectual disability: Prevalence, characteristics and challenges. *Journal of Intellectual Disability Research*, 56(6), 620-631. doi:10.1111/j.1365-2788.2011.01502.x
- Hergenrather, K., & Rhodes, S. (2007). Exploring undergraduate student attitudes toward persons with disabilities: Application of the disability social relationship scale. *Rehabilitation Counseling Bulletin*, 50(2), 66-75. doi:10.1177/00343552070500020501
- Hertfordshire Police and Crime Commissioner. (2015). *Victims and Witnesses of Crime*. Welwyn Garden City: Hertfordshire Police and Crime Commissioner.
- Hill, M. (1997). Participatory research with children. *Child & Family Social Work*, 2(3), 171-183. doi:10.1046/j.1365-2206.1997.00056.x
- HM Government. (1998). *Human Rights Act*. London: HMSO.
- Horner-Johnson, W., & Drum, C. E. (2006). Prevalence of maltreatment of people with intellectual disabilities: A review of recently published research. *Mental retardation and developmental disabilities research reviews*, 12(1), 57-69.

- Humphrey, N., & Lewis, S. (2008). Make me normal: The views and experiences of pupils on the autistic spectrum in mainstream secondary schools. *Autism*, 12(1), 23-46.
- Humphry, N. (2008). Including pupils with autistic spectrum disorders in mainstream schools. *Support for Learning*, 23(1), 41-47. doi:10.1111/j.1467-9604.2007.00367.x
- Hurley, R. S., Losh, M., Parlier, M., Reznick, J. S., & Piven, J. (2007). The broad autism phenotype questionnaire. *Journal of Autism and Developmental Disorders*, 37(9), 1679-1690.
- Huws, J. C., & Jones, R. S. (2010). 'they just seem to live their lives in their own little world': Lay perceptions of autism. *Disability & Society*, 25(3), 331-344.
- Jawaid, A., Riby, D. M., Owens, J., White, S. W., Tarar, T., & Schulz, P. E. (2012). 'Too withdrawn' or 'too friendly': Considering social vulnerability in two neuro-developmental disorders. *Journal of Intellectual Disability Research*, 56(4), 335-350. doi:10.1111/j.1365-2788.2011.01452.x
- Kanner, L. (1943). Autistic disturbances of affective contact. *Nervous Child*, 2, 217-250.
- Kogan, M. D., Strickland, B. B., Blumberg, S. J., Singh, G. K., Perrin, J. M., & van Dyck, P. C. (2008). A national profile of the health care experiences and family impact of autism spectrum disorder among children in the united states, 2005-2006. *Pediatrics*, 122(6), 1149-1158. doi:10.1542/peds.2008-1057
- Landström, S., Granhag, P. A., & Hartwig, M. (2007). Children's live and videotaped testimonies: How presentation mode affects observers' perception, assessment and memory. *Legal and Criminological Psychology*, 12(2), 333-348. doi:10.1348/135532506X133607

Laney, C., Kaasa, S. O., Morris, E. K., Berkowitz, S. R., Bernstein, D. M., & Loftus, E.

F. (2008). The red herring technique: A methodological response to the problem of demand characteristics. *Psychological Research*, 72(4), 362-375.

doi:10.1007/s00426-007-0122-6

Low, M. (2017). A novel clinical framework: The use of dispositions in clinical practice.

A person centred approach. *Journal of evaluation in clinical practice*, 1-9.

doi:10.1111/jep.12713

Lundström, S., Chang, Z., Råstam, M., Gillberg, C., Larsson, H., Anckarsäter, H., &

Lichtenstein, P. (2012). Autism spectrum disorders and autistic like traits:

Similar etiology in the extreme end and the normal variation. *Archives of general psychiatry*, 69(1), 46-52.

Magiati, I., Charman, T., & Howlin, P. (2007). A two-year prospective follow-up study of

community-based early intensive behavioural intervention and specialist

nursery provision for children with autism spectrum disorders. *Journal of Child*

*Psychology and Psychiatry*, 48(8), 803-812. doi:10.1111/j.1469-

7610.2007.01756.x

Maras, K. L., & Bowler, D. M. (2014). Eyewitness testimony in autism spectrum

disorder: A review. *Journal of Autism and Developmental Disorders*, 44(11),

2682-2697. doi:10.1007/s10803-012-1502-3

Maras, K. L., Memon, A., Lambrechts, A., & Bowler, D. M. (2013). Recall of a live and

personally experienced eyewitness event by adults with autism spectrum

disorder. *Journal of Autism and Developmental Disorders*, 43(8), 1798-1810.

doi:10.1007/s10803-012-1729-z

- Marsland, D., Oakes, P., & White, C. (2007). Abuse in care? the identification of early indicators of the abuse of people with learning disabilities in residential settings. *The Journal of Adult Protection*, 9(4), 6-20. doi:10.1108/14668203200700023
- Matsumoto, D. (2001). *The handbook of culture and psychology*. London: Oxford University Press.
- Mattison, M. L., Dando, C. J., & Ormerod, T. C. (2015). Sketching to remember: Episodic free recall task support for child witnesses and victims with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 45(6), 1751-1765. doi:10.1007/s10803-014-2335-z
- Mattison, M. L., Dando, C. J., & Ormerod, T. C. (2016). Drawing the answers: Sketching to support free and probed recall by child witnesses and victims with autism spectrum disorder. *Autism: International Journal of Research and Practice*, 1-14. doi:10.1177/1362361316669088
- McCarthy, M., & Thompson, D. (1996). Sexual abuse by design: An examination of the issues in learning disability services. *Disability & Society*, 11(2), 205-217.
- McCorry, E., Henry, L., & Happe, F. (2007). Eye-witness memory and suggestibility in children with asperger syndrome. *Journal of Child Psychology and Psychiatry*, 48(5), 482-489. doi:10.1111/j.1469-7610.2006.01715.x
- Mesibov, G. B., Adams, L. W., & Schopler, E. (2000). Autism: A Brief History. *Psychoanalytic Inquiry*, 20(5), 637-347.
- Milne, R., & Bull, R. (2001). Interviewing witnesses with learning disabilities for legal purposes. *British Journal of Learning Disabilities*, 29(3), 93-97. doi:10.1046/j.1468-3156.2001.00139.x



- Milne, R., Clare, I. C., & Bull, R. (1999). Using the cognitive interview with adults with mild learning disabilities. *Psychology, Crime & Law*, 5(1-2), 81-99.  
doi:10.1080/10683169908414995
- Ministry of Justice. (2011). *Achieving Best Evidence in Criminal: Guidance on interviewing victims and witnesses, and guidance on using special measures*. London: HMSO.
- Ministry of Justice. (2015). *Code of Practice for Victims of Crime*. London: HMSO.
- Montes, G., Halterman, J. S., & Magyar, C. I. (2009). Access to and satisfaction with school and community health services for US children with ASD. *Pediatrics*, 124(4), 407-413. doi:10.1542/peds.2009-1255L
- Mueller-Johnson, K., Toglia, M. P., Sweeney, C. D., & Ceci, S. J. (2007). The perceived credibility of older adults as witnesses and its relation to ageism. *Behavioral Sciences & the Law*, 25(3), 355-375. doi:10.1002/bsl.765
- Murray, A., Booth, T., McKenzie, K., & Kuenssberg, R. (2016). What range of trait levels can the autism-spectrum quotient (AQ) measure reliably? an item response theory analysis. *Psychological Assessment*, 28(6), 673-683.  
doi:10.1037/pas0000215
- Mussweiler, T., & Strack, F. (2000). The use of category and exemplar knowledge in the solution of anchoring tasks. *Journal of Personality and Social Psychology*, 78(6), 1038-1052. doi:10.1037//0022-3514.78.6.1038
- Myers, B. J., Mackintosh, V. H., & Goin-Kochel, R. P. (2009). "My greatest joy and my greatest heart ache:" parents' own words on how having a child in the autism spectrum has affected their lives and their families' lives. *Research in Autism Spectrum Disorders*, 3(3), 670-684.

- Nadler, J., & Rose, M. R. (2003). Victim impact testimony and the psychology of punishment. *Cornell Law Review*, 88(2), 419-456.
- Neely-Barnes, S. L., Hall, H. R., Roberts, R. J., & Graff, J. C. (2011). Parenting a Child With an Autism Spectrum Disorder: Public Perceptions and Parental Conceptualizations. *Journal of Family Social Work*, 14(3), 208-225.
- Nevill, R. E., & White, S. W. (2011). College students' openness toward autism spectrum disorders: Improving peer acceptance. *Journal of Autism and Developmental Disorders*, 41(12), 1619-1628. doi:10.1007/s10803-011-1189-x
- Nikonova, O., & Ogloff, J. R. (2005). Mock jurors' perceptions of child witnesses: The impact of judicial warning. *Canadian Journal of Behavioural Science*, 37(1), 1-19. doi:10.1037/h0087241
- NSPCC. (2016, September 6th). *Child witnesses need more support*. Retrieved from NSPCC: [https://www.nspcc.org.uk/what-we-do/news-opinion/child-witnesses-need-support/?\\_t\\_id=1B2M2Y8AsgTpgAmY7PhCfg%3d%3d&\\_t\\_q=research+into+child+witnesses+seeing+the+perpetrator&\\_t\\_tags=language%3aen%2csiteid%3a7f1b9313-bf5e-4415-abf6-aaf87298c667&\\_t\\_ip=10.99.66](https://www.nspcc.org.uk/what-we-do/news-opinion/child-witnesses-need-support/?_t_id=1B2M2Y8AsgTpgAmY7PhCfg%3d%3d&_t_q=research+into+child+witnesses+seeing+the+perpetrator&_t_tags=language%3aen%2csiteid%3a7f1b9313-bf5e-4415-abf6-aaf87298c667&_t_ip=10.99.66).
- Obeid, R., Daou, N., DeNigris, D., Shane-Simpson, C., Brooks, P. J., & Gillespie-Lynch, K. (2015). A Cross-Cultural Comparison of Knowledge and Stigma Associated with Autism Spectrum Disorder Among College Students in Lebanon and the United States. *Journal of Autism and Developmental Disorders*, 45(11), 3520–3536.
- Ochs, E., Kremer-Sadlik, T., Solomon, O., & Sirota, K. G. (2001). Inclusion as social practice: Views of children with autism. *Social Development*, 10(3), 399-419.

- Orne, M. T. (2002). On the social psychology of the psychological experiment: With particular reference to demand characteristics and their implications. *Prevention & Treatment, 5*(1), 776-783. doi:10.1037/1522-3736.5.1.535a
- Oxford University Press. (2017, August 17). *Capability*. Retrieved from Oxford Dictionaries: <https://en.oxforddictionaries.com/definition/capability>
- Parker, J. Y. (1982). The rights of child witnesses: Is the court a protector or perpetrator? *New England Law Review, 17*(3), 643-718.
- Peled, M., Iarocci, G., & Connolly, D. A. (2004). Eyewitness testimony and perceived credibility of youth with mild intellectual disability. *Journal of Intellectual Disability Research, 48*(7), 699-703. doi:10.1111/j.1365-2788.2003.00559.x
- Petersilia, J. R. (2001). Crime victims with developmental disabilities: A review essay. *Criminal Justice and Behavior, 28*(6), 655-694.  
doi:10.1177/009385480102800601
- Plotnikoff, J., & Woolfson, R. (2007). *The 'Go-Between' Evaluation of Intermediary Pathfinder Projects*. London: Ministry of Justice.
- Pornpitakpan, C. (2004). The persuasiveness of source credibility: A critical review of five decades' evidence. *Journal of Applied Social Psychology, 34*(2), 243-281.  
doi:10.1111/j.1559-1816.2004.tb02547.x
- Pozzulo, J. D., & Dempsey, J. L. (2009). Witness factors and their influence on jurors' perceptions and verdicts. *Criminal Justice and Behavior, 36*(9), 923-934.  
doi:10.1177/0093854809338450
- Pring, J. (2005). Why it took so long to expose the abusive regime at longcare. *The Journal of Adult Protection, 17*(1), 15-23. doi:10.1108/14668203200500003

- Quigley, L. (2001). Adult protection in professional care services: the role of the employer. *Journal of Adult Protection*, 3(4), 5-13.
- Ravindran, N., & Myers, B. J. (2012). Cultural influences on perceptions of health, illness, and disability: A review and focus on Autism. *Journal of Child and Family Studies*, 21(2), 311-319.
- Richards, J. (2012). Examining the exclusion of employees with asperger syndrome from the workplace. *Personnel Review*, 41(5), 630-646.
- Righarts, S., Jack, F., Zajac, R., & Hayne, H. (2015). Young children's responses to cross-examination style questioning: The effects of delay and subsequent questioning. *Psychology, Crime & Law*, 21(3), 274-296.  
doi:10.1080/1068316X.2014.951650
- Rogers, C. L., Goddard, L., Hill, E. L., Henry, L. A., & Crane, L. (2016). Experiences of diagnosing autism spectrum disorder: A survey of professionals in the united kingdom. *Autism*, 20(7), 820-831. doi:10.1177/1362361315611109
- Sadler, G. R., Lee, H., Lim, R. S., & Fullerton, J. (2010). Recruitment of hard-to-reach population subgroups via adaptations of the snowball sampling strategy. *Nursing & Health Sciences*, 12(3), 369-374. doi:10.1111/j.1442-2018.2010.00541.x
- Schmidt, C. W., & Brigham, J. C. (1996). Jurors' perceptions of child victim-witnesses in a simulated sexual abuse trial. *Law and Human Behavior*, 20(6), 581-606.  
doi:10.1007/BF01499233
- Seo, W., & Chen, R. K. (2009). Attitudes of college students toward people with disabilities. *Journal of Applied Rehabilitation Counseling*, 40(4), 3-8.

- Sigler, J. N., & Couch, J. V. (2002). Eyewitness testimony and the jury verdict. *North American Journal of Psychology*, 4(1), 143-148.
- Sigman, M., & Ruskin, E. (1999). Continuity and change in the social competence of children with autism, down syndrome, and developmental delays. *Monographs of the Society for Research in Child Development*, 64(1), 1-10.
- Simonstein, F., & Mashiach-Eizenberg, M. (2016). Attitudes toward autism spectrum disorders among students of allied health professions. *Journal of Genetic Counseling*, 25(6), 1276-1285.
- Sin, C. H., Hedges, A., Cook, C., Mguni, N., & Comber, N. (2009). *Disabled people's experiences of targeted violence and hostility. Research Report 21*. Manchester: Equality and Human Rights Commission.
- Skogan, W. G. (1984). Reporting crimes to the police: The status of world research. *Journal of Research in Crime and Delinquency*, 21(2), 113-137.  
doi:10.1177/0022427884021002003
- Stobbs, G., & Kebbell, M. R. (2003). Jurors' perception of witnesses with intellectual disabilities and the influence of expert evidence. *Journal of Applied Research in Intellectual Disabilities*, 16(2), 107-114.
- Swaim, K. F., & Morgan, S. B. (2001). Children's attitudes and behavioral intentions toward a peer with autistic behaviors: Does a brief educational intervention have an effect? *Journal of Autism and Developmental Disorders*, 31(2), 195-205.
- Taylor, J. L., & Seltzer, M. M. (2011). Employment and post-secondary educational activities for young adults with autism spectrum disorders during the transition to adulthood. *Journal of Autism and Developmental Disorders*, 41(5), 566-574.

The American Psychiatric Association. (2013). Diagnostic Criteria for Autism Spectrum Disorder. In T. A. Association, *Diagnostic and statistical manual of mental disorders: DSM-5* (p. 299.00 (F84.0)). Arlington: American Psychiatric Publishing.

The British Psychological Society. (2009). *Code of Ethics and Conduct*. Leicester: The British Psychological Society.

The Stationery Office. (2009). *Autism Act*. London: The Stationery Office.

The Stationery Office. (2010). *Equality Act*. London: The Stationery Office.

Thornicroft, G., Rose, D., Kassam, A., & Sartorius, N. (2007). stigma: Ignorance, prejudice or discrimination? *The British Journal of Psychiatry*, 190(3), 192-193. doi:10.1192/bjp.bp.106.025791

Tracey, T. (2016). A note on socially desirable responding. *Journal of Counseling Psychology*, 63(2), 224-232. doi:10.1037/cou0000135

Unger, D. D. (2002). Employers' attitudes toward persons with disabilities in the workforce: Myths or realities? *Focus on Autism and Other Developmental Disabilities*, 17(1), 1-15.

United Kingdom Government. (1999). *The Youth Justice and Criminal Evidence Act*. London: The Stationery Office Limited.

United Nations. (1995, March 6-12). *Report of the World Summit for Social Development*. Retrieved May 01, 2017, from United Nations: <http://www.un-documents.net/aconf166-9.pdf>

United Nations. (1997). *Guidelines for Action on Children in the Criminal Justice System*. Geneva: United Nations Human Rights Office of The High Commissioner.

United Nations Human Rights . (1989). *The Convention on the Rights of the Child* .

Geneva: United Nations Human Rights .

Venkatesan, S., & Ravindran, N. (2015). Autism Behavior Checklist for Disability

Estimation: A Preliminary Field Tryout. *Psychological Studies*, 60(2), 215-225.

Vohra, R., Madhavan, S., Sambamoorthi, U., & St Peter, C. (2014). Access to services, quality of care, and family impact for children with autism, other developmental disabilities, and other mental health conditions. *Autism* , 18(7), 815-826.

doi:10.1177/1362361313512902

Webb, S. J., Jones, E. J., Kelly, J., & Dawson, G. (2014). The motivation for very early intervention for infants at high risk for autism spectrum disorders. *International Journal of Speech-Language Pathology*, 16(1), 36-42.

doi:10.3109/17549507.2013.861018

Westcott, H. L., & Jones, D. P. (1999). Annotation: The abuse of disabled children. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 40(4), 497-

506. doi:10.1017/S0021963099003893

Wheelwright, S., Auyeung, B., Allison, C., & Baron-Cohen, S. (2010). Defining the broader, medium and narrow autism phenotype among parents using the Autism Spectrum Quotient (AQ). *Molecular Autism*, 1(10), 10-10.

White, C., Holland, E., Marsland, D., & Oakes, P. (2003). The identification of environments and cultures that promote the abuse of people with intellectual disabilities: A review of the literature. *Journal of Applied Research in Intellectual Disabilities*, 16(1), 1-9. doi:10.1046/j.1468-3148.2003.00147.x

Williams White, S., Keonig, K., & Scahill, L. (2007). Social skills development in children with autism spectrum disorders: A review of the intervention research.

*Journal of Autism and Developmental Disorders*, 37(10), 1858-1868.

doi:10.1007/s10803-006-0320-x

Willner, P. (2011). Assessment of capacity to participate in court proceedings: a selective critique and some recommendations. *Psychology, Crime & Law*, 17(2), 117-131.

Ziegler, M., & Buehner, M. (2009). Modeling socially desirable responding and its effects. *Educational and Psychological Measurement*, 69(4), 548-565.

doi:10.1177/0013164408324469



## Appendix A

**Table 1**  
***Societal Attitudes towards Autism scale***

Statements	Likert Scale					
	Strongly Agree	Agree	Agree Somewhat	Undecided	Disagree Somewhat	Disagree Strongly Disagree
People with autism should not engage in romantic relationships						
People with autism should have the opportunity to go to college						
People with autism should not have children						
People with autism should be institutionalised for their safety and others						
If a facility to treat people with autism opened in my community, I would consider moving out						
Individuals with autism are incapable of living on their own						
I would be afraid to be around a person with autism						
A person with autism is an emotional burden to his/her family						
I would be comfortable sitting next to a person with autism in the same class						
A person with autism is a financial burden to his/her family						
People with autism should be encouraged to marry someone with autism						
People with autism are incapable of forming relationships and expressing affection						
Children with autism should be fully integrated into mainstream classes						
I would be uncomfortable hugging a person with autism						
People with autism cannot understand other people's feelings						
Students with autism who are mainstreamed into regular classrooms are a distraction to students without autism in that classroom						
People with autism require additional support to be successful in the work Place						
People with autism tend to be violent						
Mainstreaming children with autism into regular education classrooms poses a safety risk for children without autism in the same classroom						
People with autism need assistance communicating with others						
All individuals with autism demonstrate repetitive behaviours, such as rocking or flapping of arms or hands						
I would be comfortable sharing an office with a co-worker with autism						
I would be comfortable sitting next to a person with autism in a movie theatre						
I would be comfortable having a person with autism living in the same building as me						
I would be comfortable having a friend with autism						

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People with autism are capable of living normal lives (i.e., with a job, house, family, etc)

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*Note:* Scale modified from Flood, Bulgrin, & Morgan, (2013)

**Appendix B****Interview 1**

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I: So it's recording our voices now. Can I just check that it's okay for me to record our voices?

C: Yeah

I: Okay, so what I would like you to do, is think very carefully about the video that you watched earlier on the iPad and I would like you to tell me everything that happened on it, starting from the beginning. Now what's important, I only want you to tell me the things that you actually remember, so if there's anything that you're not sure about, I don't want you to guess or make anything up for it. It's okay to say when you can't remember

C: Some cars drive past. A police car. Then people were walking round a corner. Walked into a shop, stole something and then this man was chasing them

I: Is there anything else that you can remember from the video or have you told me everything?

C: That's everything

I: Okay, that's great, thank you... You said that there was cars driving past. Tell me what you can remember about the cars driving past?

C: I can't really remember

I: Okay, thank you... Tell me what you can remember about the police car?

C: This man and woman came out of the shop and they were running and this man was running after them

I: Okay... Tell me about the man and the woman?

C: The man had short hair and the woman had long hair

I: Okay... Tell me what they looked like?

C: They were robbers

I: Robbers, right... Okay and you said that they went round a corner and into a shop. Tell me about the shop?

C: They walked in and they stayed in there for a few minutes and they came out. I don't know what they stole, but they were running

I: Tell me what the shop looked like?

C: The shop was a small like paper newsagents shop

I: Okay... Is there anything else that you can remember about the shop?

C: No, that's everything

I: Okay... You said that a man chased the people out of the shop. Tell me about that man?

C: This man came out the shop and run after them

I: Tell me what he looked like?

C: The man had quite, like he was bald

I: Okay... Is there anything else that you can remember about the man or the video?

C: I've told you everything

I: Okay, well thank you very much

**END OF INTERVIEW**

**Interview 2**

I: So is it okay if I record our voices?

C: Yeah

I: Okay, so what I'd like to do now, is a little bit of talking about the video that you watched, but before you start, I just want to know that I only want you to tell me the things that you actually remember. I don't want you to guess or make anything up. So think about that video that you watched earlier on the iPad, and starting from the very beginning, tell me everything that you can remember about it?

C: Some cars going down the street and a roundabout, and two people going into a shop, and getting chased out

I: Is there anything else that you can remember?

C: They'd probably stolen something

I: Is there anything else that you can remember?

C: It was a tuck shop

I: Yeah...

C: Erm... Was it a man and a woman, I don't know...

I: When was that?

C: Who went into the shop

I: Oh okay... Is there anything else?

C: No, I don't think so

I: That's absolutely fine, thank you... So you said at the beginning that there was some cars going down the street. Tell me what you can remember about the cars?

C: Erm...

I: So just what you can remember...

C: There was a red car

I: Okay... You said that they were going down the street. Tell me about the street?

C: It was quite quiet... Erm...

I: Tell me about the roundabout?

C: I'm not sure...

I: That's fine... And you said that two people went into a shop and you think it might have been a man and a woman. Tell me what you can remember about the man?

C: I can't really remember

I: What about the other person?

C: I think they were wearing a hat

I: Okay... Is there anything else?

C: Shorter

I: Okay... Is there anything else?

C: Not really



## PUBLIC'S PERCEPTIONS OF INDIVIDUAL'S WITH ASC IN THE CRIMINAL JUSTICE SYSTEM

I: Okay... You said that they went into a shop and you think it said tuck shop on the window. Tell me what the tuck shop looked like?

C: I think it was purple. I can't remember much

I: You think it was purple. Is there anything else that you can remember about it?

C: Erm... Not really

I: That's fine... You said that some people got chased out. Tell me what happened?

C: Erm... They went inside and a man was like running after them

I: Okay... Tell me what you can remember about the man that was running after them

C: He might have been bald, I can't really remember

I: Is there anything else?

C: No

I: Is there anything else about the video that you want to tell me?

PUBLIC'S PERCEPTIONS OF INDIVIDUAL'S WITH ASC IN THE CRIMINAL JUSTICE SYSTEM

C: No, not really

I: Okay, thank you so much, you've been really helpful

**END OF INTERVIEW**

### Interview 3

---

I: So we're recording now. Is it okay if I record our voice?

C: Yeah, sure

I: So what I'd like you to do, is think about the video that you watched outside, and tell me everything that you can remember about it, starting from the beginning, but what I don't want you to do, is guess, or make anything up. I only want you to tell me just what you actually remember

C: Okay

I: So starting from the beginning...

C: There was a police car. Around a roundabout, there were several red and silver cars. A cyclist went past. Two teenagers walked from around the corner and entered a tuck shop. It had a Walls ice cream sign, outside. They were in there for about 10 seconds, then were chased out by, I guess the shop owner, and that was about it

I: Okay... Is there anything else that you can remember?

C: Erm... Not really

- I: Okay, thank you. So you said at the beginning, that there was a police car that went past. Tell me about the police car?
- C: It was driving as normal and the sirens weren't on. I don't know, it was florescent yellow and blue
- I: Is there anything else that you can remember about it?
- C: The teenagers, one was wearing a jacket and the other was wearing a hoodie
- I: Okay, so earlier, you said that there was a roundabout with cars going round it and some were red and some were silver. Tell me about the roundabout?
- C: There were flowers in the middle, I think. I think there were signs pointing left in that direction. Yeah, that's pretty much it
- I: Okay, and you said that there were some cars. Tell me about the cars?
- C: Erm... There were several vans, can't remember what type. I think one was a Citreon. That's pretty much it
- I: Okay... You said that there was a cyclist. Tell me about the cyclist?
- C: Erm.. He had his helmet on. Seemed like a (inaudible). I think he was wearing a fluorescent vest?

I: Okay... Is there anything else that you can remember about the cyclist?

C: Not really

I: Okay... And then you said that two teenagers walked from around the corner. Tell me about that bit?

C: It was a standard corner. They just walked round, coming up to the roundabout, so just before. Once they walked around the corner, they walked about 20 feet

I: So think about the first teenager and tell me everything that you can remember about that person

C: He was wearing a hoodie. He had the hood down. Yeah, that's about it

I: Okay... What about the second teenager. Tell me about the second teenager?

C: It looked like, more like a girl. She was wearing a jacket type thing. It was open at the front. I can't remember what was on it

I: Is there anything else that you can remember about the two teenagers?

C: Just that they walked in the store

I: Okay... You said that the shop that they went into was a tuck shop. Tell me what you can remember about the shop?

C: It was blue with glass windows on the front. It had a single step up. Not much else

I: Okay... And you said that there was a Walls ice cream sign outside. Tell me about that?

C: It was one of them things that flaps in the wind, on a lead base type thing

I: Okay

C: It goes up

I: Okay... And you said that the teenagers went into the shop for a bout 10 seconds and they were chased out. Tell me about that bit?

C: They left in a hurry and the shop keeper was chasing them

I: Okay... Then what happened?

C: They went back round the corner

I: Okay... Tell me about the shop keeper?

C: He was quite large. It looked like he was wearing a sweater. He had his sleeves rolled up to about his elbow. That's about it

I: Okay... Is there anything else that you can remember about the video?

C: No, not really

I: Okay, well thank you very much. That was very helpful

**END OF INTERVIEW**

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**Interview 4**

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I: Is it all right if I record our voices?

C: (nods)

I: Is it okay if you talk, as the recorder can't hear you when you nod

C: Yeah

I: Thank you, that's very kind of you. What I'd like us to do now, is a little bit of talking about the video that you watched on the iPad... So just like before, when I asked you some questions on the picture game, and you didn't know the answer, you said 'I don't know'. I want you to do the same for this bit. I just want you to tell me what you actually remember, okay

So thinking about the video, tell me everything that you can remember, starting from the beginning?

C: First I saw some cars going past and then I saw two men come round a corner and go into a shop. The two men ran out with a third man running after them

I: Okay... Is there anything else that you can remember?

C: No



I: No, okay. You've told me lots of things there, thank you... You said that some cars were going past at the beginning. Tell me about the cars?

C: It was quite a lot of them

I: Can you remember anything about them, or what they looked like?

C: They were all different colours

I: Okay

C: I can't remember anything else

I: Okay... Thank you for trying. And you said that two men came from around the corner. Tell me about the two men that came round the corner on the video

C: (pause)

I: Just what you can remember...

C: I can't really remember

I: That's okay... And you said that they went into a shop. Can you remember anything about the shop?

C: It was a little one joined up to lots of others

I: Okay... Tell me what it looked like

C: I think it was blue

I: Hmmm mmmm

C: And I can't remember anything else

I: That's okay. You've told me lots of things so far... You said that they came running out, and there was a third man running after them. Tell me about that bit?

C: I think he was quite angry with them coming in

I: Okay... Tell me about the third man. What did he look like?

C: I think he was bald

I: Okay...

C: And I think he was telling them off for coming in

I: Okay, is there anything else that you can remember about him?

C: No

I: Is there anything else that you can remember about the video?

C: No

I: No, okay, thank you for your help. I'm going to stop recording our voices now

**END OF INTERVIEW**

## Table 2

### Credibility characteristics

## Truthfulness

The witness was telling lies

The witness appeared to be credible in their responses and answers

The witness didn't appear to respond with credible answers or statements

The witness appeared to give accurate responses and descriptions

The witness didn't appear to accurately recall the situation and descriptions

The witness seemed to be honest

The witness seemed dishonest

The witness was believable

The witness didn't appear believable

The witness appeared competent in their responses

The witness seemed incompetent at responding

The witness appeared confident in what they were saying

The witness appeared uncertain in their responses

The witness appeared capable of answering the questions

The witness didn't appear capable of answering the questions

*Note:* Characteristics modified from Henry, Ridley, Perry, & Crane, (2011) and Stobbs & Kebbell, (2003)

**Appendix D****Statement of participant recruitment on Facebook**

“Hi Everyone,

As you all know, I am currently completing my Msc. Family & Child Psychology at the University of Chester.

I am currently starting my dissertation, which aims to investigate the public's perceptions of vulnerable witnesses, specifically children with autism spectrum condition.

If you would like to take part in the online study, please could I ask that you private message me so I can forward you the URL.

The study should take no longer than 30 minutes.

I would be grateful for your support.

Thank you kindly,

Liz Taylor”

**Appendix E****Public Perception of Witnesses with Autism Spectrum Condition****PARTICIPANT INFORMATION SHEET**

*I would like to invite you to participate in an online research study as part of my Dissertation for my Msc. Family and Child Psychology degree, at the University of Chester. Please read this participant information sheet before deciding whether you would like to participate in the study or not. It is important that you understand why I am carrying out the research and what it is comprised of. Please could I ask that you take your time to read the information carefully and ensure you feel you have understood and have enough information to make your decision whether you wish you proceed. If you require any more information, please contact me using the details below. Please be advised that you do not have to take part in this research if you do not want to.*

*Thank you for your time.*

What is the purpose of the study?

This is an academic study investigating the public's perceptions of vulnerable witnesses, specifically children with autism. The purpose is to obtain information on how vulnerable witnesses are viewed by individuals who have the potential to be jurors themselves within the criminal justice system. The data, which will remain anonymous, will be analysed to provide further understanding of how vulnerable witnesses may be perceived by potential jurors.

Why have I been chosen to take part?

You have been chosen to take part in this study as you are over the age of 18.

What do I have to do?

You will be asked initially to complete a questionnaire that comprises of 26 statements, requiring you to determine how likely you agree or disagree, utilising the Likert scale provided. On completion of this stage, you will then be asked to read four short interview transcripts. The transcripts are the recall of events from children (some of whom will have autism). The transcripts are based on a non-violent shop theft video that the children watched. After reading each transcript, you will be asked to respond 16 statements, advising how credible you consider the witness to be. You will need to decide whether you agree or disagree with the statements using the Likert scale provided.

You are not obliged to answer all the questions, however questionnaires that are partially completed may still be used for data analyses.

It should take you no longer than 30 minutes to complete this study.

Who is conducting the study?

I, Elizabeth Taylor, will be analysing the data which will contribute to my dissertation. If you have any questions, problems or complaints regarding the study please contact myself; [1612054@chester.ac.uk](mailto:1612054@chester.ac.uk), or my Research Dissertation Supervisor, Dr Michelle Mattison, [m.mattison@chester.ac.uk](mailto:m.mattison@chester.ac.uk).

Is participation voluntary?

Your participation in this study is entirely voluntary. You do not have to take part, and can choose to withdraw from the study at any point whilst completing it by closing down your browser, without giving any reason.

Please be aware that your responses may be analysed if you withdraw from the study partway through. Please be advised once you have completed and submitted your answers to the questionnaire, you will not be able to request your answers be withdrawn as they will be automatically anonymised and unidentifiable alongside other participants responses.

#### What are the risks/benefits of taking part in the study?

You will not be exposed to any direct harmful effects by participating within this study. However if you find you have been affected by participating in the study due to having autism spectrum condition or due to knowing someone with autism spectrum condition, please contact the below helpline for further information, guidance and support.

*The National Autistic Helpline: 0808 800 4104*

Monday-Thursday: 10.00 to 16.00, Friday: 09.00 to 15.00

Please be advised that there are no right or wrong answers to the statements within this study, and your views and opinions will not be used to identify you.

The benefits of this study is that you will enable me to carry out the identified research, and intern provide me with data to analyse for the purposes of my dissertation. Though there will be no direct benefits to yourself for completing this study, if you are a student at the University of Chester, you will receive two RPS credits.

#### What about confidentiality?

All information with this study is strictly confidential and will only be used for the purposes of academic assessment. All your answers will be completely anonymous and will be stored securely. If you wish to reduce the risk of individuals around you seeing your answers, ensure you exit the browser appropriately after submitting your answers.

Data will be stored according to the Data Protection Act and the University Research Policies. Once analysis is completed, data will be kept in a password protected file and will be confidentially destroyed after academic assessment in March 2022.

#### What about the results?

The results from this study will be used for academic assessment purposes, in completion of my Research Dissertation. Participants will not be able to be identified within any part of my Research Dissertation, as all answers will be anonymised once pooled. Due to all data being anonymous, individual feedback will not be available.

#### What if I am unhappy or if there is a problem?

If you find yourself unhappy with this study or believe there is a problem, please contact my Supervisor, Dr Michelle Mattison, [m.mattison@chester.ac.uk](mailto:m.mattison@chester.ac.uk).

#### Ethical Approval

Ethical approval for the study has been sought and obtained from The Department of Psychology Ethics Committee.

**If you would like to take part, please read and confirm that you agree with the following statements:**

- **I am over the age of 18 years old**
- **I understand what my participation involves**
- **I understand that my participation is entirely voluntary and that I can withdraw at any time**

**Please be aware by clicking 'next' you have consented to take part in this study. If you have read the information and you do not wish to take part, please exit the browse**



**Appendix F****Debrief Sheet**

Thank you very much for taking part in this study, your time is greatly appreciated. This study was conducted by Elizabeth Taylor and supervised by Dr Michelle Mattison.

This was an academic study investigating the public's perceptions of vulnerable witnesses, specifically children with autism, as witnesses within a criminal justice context. The purpose was to obtain information on how vulnerable witnesses would be viewed by individuals, who have the potential to be jurors themselves within the criminal justice system.

This study aims to identify and assist in the eradication of social prejudices that may be held by individuals who have the potential to be jurors, towards vulnerable witnesses, specifically children with autism.

The data will remain anonymous, and will be analysed to provide further understanding of how vulnerable witnesses may be perceived by potential jurors, therefore we will be unable to provide individual feedback on none of the questionnaires. All results will remain anonymous and will not be singled out at any point.

As per the Data Protection Act and the University of Chester's Research policies, data will be kept securely, and all data will be kept in a password protected file, and confidentially destroyed after academic assessment has been completed in February 2018.

If you find you have been affected by participating in this study due to knowing someone with autism, please contact the below helpline for further information, guidance and support.

The National Autistic Helpline: 0808 800 4104

Monday-Thursday: 10.00 to 16.00, Friday: 09.00 to 15.00

If you are a student at the University of Chester, further guidance and support may also be sought from the Student Support Centre.

Email: [student.support@chester.ac.uk](mailto:student.support@chester.ac.uk)

Tel: 01244 511550

**Please be advised that there are no right or wrong answers to the statements within this study, and your views and opinions will not be used to identify you.**

If you have any questions, problems or complaints regarding this study please contact myself; 1612054@chester.ac.uk, or my Research Dissertation Supervisor, Dr Michelle Mattison, m.mattison@chester.ac.uk.

**Thank you for your time and support in completing this study**

**Appendix G**

Staff / Office Use Only

**DOPEC NUMBER:** \_\_\_\_\_**Umbrella project DOPEC number (staff)** \_\_\_\_\_

AIF

**APPLICANT SURNAME:** Taylor, Elizabeth**Please complete all questions by underlining the correct response to facilitate correct processing**

**APPLICANT:** UG PGT PGR STAFF

**REVIEW PROCESS:** Accelerated / Full

**APPLICATION STATUS:** NEW APPLICATION, MAJOR AMENDMENT, RESUBMISSION

**APPLICATION FOR:** DISSERTATION, TEACHING, RESEARCH & PUBLICATION

**ATTENDANCE AT HEALTH & SAFETY BRIEFING:** YES / NO / NA

**INCLUSION OF RISK ASSESSMENT FORM:** YES / NO / NA

**NOTES ON THE ROLE AND FUNCTION OF THE DEPARTMENT OF PSYCHOLOGY ETHICS COMMITTEE.**

- All decisions of the committee are based on the application form and reviewers comments *ONLY*. Forms should be as detailed and clear as possible. Verbal discussions are not considered as part of the application or review process.
- The review process strictly adheres to the University of Chester Research Governance Handbook and the BPS Code of Ethics.
- The decision of the committee is final. If you are a UG, PGT or PGR student you should discuss the decision of the committee with your supervisor. If you are a member of staff you may contact the chair of the committee for further clarification.

Before completing the form researchers are expected to familiarise themselves with the regulatory codes and codes of conduct and ethics relevant to their areas of research, including those of relevant professional organisations and ensure that research which they propose is designed to comply with such codes.

Department of Psychology Ethical Approval for Research: Procedural Guidelines.

University of Chester Research Governance Handbook

[http://ganymede2.chester.ac.uk/view.php?title\\_id=522471](http://ganymede2.chester.ac.uk/view.php?title_id=522471)

BPS Code of Ethics

[http://www.bps.org.uk/system/files/Public%20files/bps\\_code\\_of\\_ethics\\_2009.pdf](http://www.bps.org.uk/system/files/Public%20files/bps_code_of_ethics_2009.pdf)

BPS Code of Human Research Ethics

[http://www.bps.org.uk/sites/default/files/documents/code\\_of\\_human\\_research\\_ethics.pdf](http://www.bps.org.uk/sites/default/files/documents/code_of_human_research_ethics.pdf)

BPS Guidelines for Internet-mediated Research

<http://www.bps.org.uk/system/files/Public%20files/inf206-guidelines-for-internet-mediated-research.pdf>

BPS Research Guidelines and Policy Documents

<http://www.bps.org.uk/publications/policy-and-guidelines/research-guidelines-policy-documents/research-guidelines-poli>

Any queries email: [psychology\\_ethics@chester.ac.uk](mailto:psychology_ethics@chester.ac.uk)

**CHECK LIST.**

Please complete the form below indicating attached materials. Prior to submission supervisors must confirm that they have reviewed the application by completing the supervisors column.

<i>Notes: Students to indicate where information is found, supervisor to confirm by ticking green column</i>	Supervisor confirmation	Information sheet	Letter	Email	Email info. page	Consent Form	PowerPoint	N/A
Brief details about the purpose of the study	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contact details for further information	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explanation of how and why participant has been chosen	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Notification that materials/interviews are not diagnostic tools/therapy or used for staff review/development purposes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explanation participation is voluntary	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Details of any incentives or compensation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Details of how consent will be obtained	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If research is observational, consent to being observed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Details of procedure so participants are informed about what to expect	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Details of time commitments expected	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Details of any stimuli used	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explanation of right to withdraw and right to withdraw procedure	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Option for omitting questions participant does not wish to answer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Procedure regarding partially completed questionnaires or interviews	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With interviews, information regarding time limit for withdrawal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Details of any advantages and benefits of taking part	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Details of any disadvantages and risks of taking part	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Information that data will be treated with full confidentiality and that, if published, those data will not be identifiable as theirs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Debriefing details	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dissemination information	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Further information (relevant literature; support networks etc)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Supervisor Signature:****Michelle Mattison****Date: 08/03/17**

**DEPARTMENT OF PSYCHOLOGY  
APPLICATION TO DEPARTMENTAL  
ETHICS COMMITTEE**



**University of  
Chester**

**IN COMPLETING THE FORM UG & PGT STUDENTS PLEASE REFER TO YOUR  
HANDBOOK**

**Question 1: Working title of the study**

*Notes: The title should be a single sentence*

Public Perception of Witnesses with Autism Spectrum Condition

**Question 2: Applicant, name and contact details.**

*Notes: The primary applicant is the name of the person who has overall responsibility for the study. Include their appointment or position held and their qualifications. For studies where students and/or research assistants will undertake the research, the primary applicant is the student (UG, PGT, PGR) and supervisor is the co-applicant.*

Elizabeth Taylor  
1612054@chester.ac.uk  
Qualification held: B.A Hons Social Work  
Registration: Registered Social Worker with the Care Council for Wales  
Currently studying Msc. Family & Child Psychology

**Question 3: Co-applicants**

*Notes: List the names of all researchers involved in the study. Include their appointment or position held and their qualifications.*

Dr Michelle Mattison  
m.mattison@chester.ac.uk  
Qualification held: PhD  
Registration: Registered Intermediary with the National Crime Agency (NCA), the Ministry of Justice, and Triangle  
Appointment/position held: Lecturer in forensic psychology, research methods and statistic at undergraduate and postgraduate level, as well as supervising undergraduate and postgraduate dissertations at the University of Chester. Outside of the university Dr Mattison trains police, social workers, barristers, and judges in regards to effective communication with children and people who have disabilities and communication impairments.

**Question 4: What are the start and end dates of the study?**

*Notes: If exact dates are unavailable, explain why and give approximate dates.*

- Start: March 2017 to October 2017: Inclusive of data collection and dissertation write up
- Post October 2017 to March 2022: To allow for further data analysis and potential publication of findings

**Question 5: Is this project subject to external funding?**

*Notes: Please provide details of the funding body, grant application and PI.*

No.

**Question 6: Briefly describe the purpose and rationale of the research**

*Notes: In writing the rationale make sure that the research proposed is grounded in relevant literature, and the hypotheses emerge from recent research and are logically structured.*

*PGR / Staff if this application is for a funded project please attach any detailed research proposals as appropriate.*

*Maximum word length (300 words)*

Vulnerable witnesses in England and Wales are currently defined as; "All child witnesses (under 18); and any witness whose quality of evidence is likely to be diminished because they: are suffering from a mental disorder (as defined by the Mental Health Act (1983)); have a significant impairment of intelligence and social functioning; or have a physical disability or are suffering from a physical disorder" (Youth Justice and Criminal Evidence Act, 1999, section 16). Witnesses defined as vulnerable, suggestively are recognised to be at greater risk of victimisation than the general public (Sin, Hedges, Cook, Mguni, & Comber, 2009). If such victimisation is reported within the criminal justice system, it is likely that some witnesses will have contact also with juries. It is argued that a jurors' outlook has implications on their judgments and decision making (Louden & Skeem, 2007), particularly on factors such as mental health, age and intellectual disability (Barnett, Brodsky, & Price, 2007).

However individuals with an intellectual disability are reported as being twice as likely to fall victim to crime as the general population (Horner-Johnson & Drum, 2006). They are conveyed also, as being less likely to report crimes against them and more likely to experience rejection by the criminal justice system if reporting such crimes (Willner, 2011). One reason highlighted for such exclusion is suggested as individuals with intellectual disabilities as being unreliable in giving evidence (Petersilia, 2001).

Furthermore, children diagnosed with autism, who may display behaviours such as social interaction and communication deficits (Venkatesan & Ravindran, 2015), are reportedly at greater risk of rejection, hostile responses and poor treatment within society (Harnum, Duffy, & Ferguson, 2007). Farrugia, (2009), suggests the growth of autism etiology is the basis for prejudiced stereotypes of autism over the years. The stigma and discrimination of individuals with autism is something documented as being prevalent worldwide (Obeid, et al., 2015). The difficulty being the disparity of understanding amongst populations, contributing to that populations views and actions towards those with autism (Ravindran & Myers, 2012). Additionally, due to the lack of visible indications that an individual has autism, those around them with lack of understanding, may observe the individual as behaving in an unacceptable manner against social norms (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003). Stereotypes that may form from discrepancy's in society's knowledge, are then argued to contribute to negative outcomes within meaningful aspects of life for those with autism (Gray, 2002).

Though individuals with autism's interaction with public services within the United Kingdom are influenced through specific legislation (Autism Act, 2009), and wider equality legislation (Equality Act, 2010), compulsory requirements employed by education and health and social care, do not apply to the Criminal Justice System (Crane, Maras, Hawken, Mulcahy, & Memon, 2016). Therefore, those with Autism could be perceived as considerably more vulnerable within this arena (Cummins, 2011).

Consequently, due to literature identifying individuals with autism as vulnerable within the criminal justice system; not only due to their diagnosis of autism (Youth Justice and Criminal Evidence Act, 1999), but also the public's potential discrepancy's in their knowledge base of autism (Ravindran & Myers, 2012), this research aims to identify whether the public's perception of vulnerable witnesses with autism, impacts on their decision of the individuals credibility.

**Question 7: Describe the methods and procedures of the study**

*Notes: Attach any relevant material (questionnaires, supporting information etc.) as appendices and summarise them briefly here (e.g. Cognitive Failures Questionnaire: a standardised self-report measure on the frequency of everyday cognitive slips). Do not merely list the names of measures and/or their acronyms. Include information about any interventions, interview schedules, duration, order and frequency of assessments. It should be clear exactly what will happen to participants. If this is a media based study describe and list materials include links and sampling procedure. (500 words)*

The study will be comprised of 2 online questionnaires, estimated to take participants 30 minutes from start to finish.

Participants, after the completion of the consent section (See appendix A), will be asked to complete a Societal Attitudes towards Autism Scale, based on the scale comprised by Flood, Bulgrin, & Morgan, (2013). This scale will be presented to participants as the first questionnaire they are requested to complete. Participants will be requested to identify on a 7 point Likert scale, where they feel the statement is most relevant (see appendix B).

On completion of the first questionnaire, participants will be asked to read 4 transcripts, which entail children, some of whom have autism spectrum condition, individually recalling events that they have previously watched via a video (See appendix C). The transcripts detail an interviewer proposing questions and comments to the child in relation to the non-violent or non-distressing shop theft they have just watched. The transcripts are previously collected data from prior research. The supervisor will forward the transcripts and the relevant ethics application to the Ethics Committee.

After reading each transcript, participants will be asked to complete the second questionnaire. The questionnaire is comprised of statements relating to 8 credibility characteristics. The statements utilised within the questionnaire have been modified from previous research by Henry, Ridley, Perry, & Crane, (2011) and Stobbs & Kebbell, (2003). The 8 characteristics have 2 statements linked to them. See appendix D For example,

Characteristic: Accuracy:

1) The witness appeared to give accurate responses and descriptions.

2) The witness didn't appear to accurately recall the situation and descriptions.

Again, participants will be requested to respond to the 26 statements using the Likert scale provided.

The study will be complete once all 4 transcripts and associated questionnaires have been completed. The debrief sheet will then appear in the next window. See appendix E.

**Question 8: Has the person carrying out the study had previous experience of the procedures? If not, who will supervise that person?**

*Notes: Say who will be undertaking the procedures involved and what training and/or experience they have. If supervision is necessary, indicate who will provide it.*

Elizabeth has no prior experience of the procedures planned to take place. Therefore the supervisor will provide supervision throughout.

**Question 9: What ethical issues does this study raise and what measures have been taken to address them?**



*Notes: Describe any discomfort or inconvenience that participants may experience. Include information about procedures that for some people could be physically stressful or might impact on the safety of participants, e.g. interviews, probing questions, noise levels, visual stimuli, equipment; or that for some people could be psychologically stressful, e.g. mood induction procedures, tasks with high failure rate. Discuss any issues of anonymity and confidentiality as they relate to your study, refer to ethics handbook and guidance notes at the end of the form. If animal based include ethical issues relating to observation.*

The research does not anticipate causing any of the participant's psychological distress or discomfort. However, the researchers are mindful that some participants may have autism spectrum condition themselves and/or may know someone who has autism spectrum condition. Therefore, within the information and debrief sheet's appropriate contact support has been provided. Contact information has been made available for the National Autistic Helpline for all participants, as well as the University of Chester Student Support for participants that are students at the university. See appendix A & E.

All data collected from this study will remain anonymous, and no individual participants will be identifiable at any point during the research, or in the write up of findings / publication. This will mean once participants have completed the study they will not be able to request individual feedback on their submission or have their data removed. This is highlighted to participants in both the information and debrief sheets. See appendix A & E.

All data will remain confidential and anonymous, and will be stored securely as per the Data Protection Act, and the University of Chester's research policies and ethical guidelines. Participants are advised of this also on both the information and debrief sheets. See appendix A & E. Data will be stored on a password protected computer and within a password protected file that only the research team, Elizabeth Taylor and Dr Michelle Mattison can access.

Once the research is completed and publication is sought, the data will additionally remain anonymous and no participants will be able to be identified. The data will also be handled and stored as per the Data Protection Act and University of Chester research policies and ethical guidelines.

Researchers in regards to all participants and their data, at every point within the research and potential publication will also adhere to the British Psychological Society Code of Ethics and Conduct (2009), and Code of Human Research Ethics (2010). Elizabeth will also adhere to the Care Council for Wales Code of Professional Practice (2015) and the British Association of Social Worker Code of Ethics (2012) throughout.

**Question 10: Who will the participants be?**

*Notes: Describe the groups of participants that will be recruited and the principal eligibility criteria and ineligibility criteria. Make clear how many participants you plan to recruit into the study in total.*

This study will be available to any individual over the age of 18 years old. The study does not have an ineligibility criteria.

The researchers aim to recruit at least 60 participants via an advertisement on Facebook. See appendix F.

**Question 11: Describe participant recruitment procedures for the study**



*Notes: Gives details of how potential participants will be identified or recruited. Include all advertising materials (social media messages, posters, emails, letters, verbal script etc.) as appendices and refer to them as appropriate. Describe any screening examinations. If it serves to explain the procedures better, include as an appendix a flow chart and refer to it.*

Participants will be recruited via an advertisement posted on Elizabeth's Facebook page. The advertisement will advise that she is doing a study on the public's perception of witnesses with autism spectrum condition for her dissertation. Potential participants will then be asked to send Elizabeth a private message on Facebook if they wish to take part. Potential participants will then be sent the URL for the study via a private message. See appendix F.

#### Question 12: Describe the procedures to obtain informed consent

*Notes: Describe when consent will be obtained. If consent is from **adult participants**, give details of who will take consent and how it will be done. If you plan to seek informed consent from **vulnerable groups** (e.g. people with learning difficulties, victims of crime), say how you will ensure that consent is voluntary and fully informed.*

*If you are recruiting **children or young adults** (aged under 18 years) specify the age-range of participants and describe the arrangements for seeking informed consent from a person with parental responsibility. If you intend to provide children under 16 with information about the study and seek agreement, outline how this process will vary according to their age and level of understanding.*

*How long will you allow potential participants to decide whether or not to take part? What arrangements have been made for people who might not adequately understand verbal explanations or written information given in English, or who have special communication needs?*

*If you are not obtaining consent, explain why not.*

Participants will initially be requested to read the information sheet which will appear at the beginning of the study. The information sheet details that participation within the study is voluntary and that they do not have to take part. Participants at this point will additionally be advised that they can choose to withdraw from the study at any point whilst they are completing it, without providing reason. However they will also be advised that their responses may still be analysed if they chose to withdraw from the study partway through. See appendix A.

At the end of the information sheet before the study starts, participants are requested to read and click and confirm if they wish to participate and agree with the below statements:

- They are over 18
- They understand that their participation is entirely voluntary and that they can withdraw at any time
- They understand what their participation involves.

They will then be advised again that by clicking 'next' that they have consented to taking part in the study. However at this point they are also advised that if they have read the information and do not want to take part then they can exit the browser. See appendix A.

#### Question 13: Will consent be written?

No (delete as appropriate)

*Notes: If yes, include a consent form as an appendix. If no, describe and justify an alternative procedure (verbal, electronic etc.) in the space below.*

*Guidance on how to draft Participant Information sheet and Consent form can be found on PS6001 Moodle space and in the Handbook.*

No, consent will be obtained electronically.

The study will take place online, therefore consent will be obtained by participants after they have read the information sheet and read, agreed and consented to the below statements, and then clicking next. See appendix A.

- They are over 18
- They understand that their participation is entirely voluntary and that they can withdraw at any time
- They understand what their participation involves.

**Question 14: What will participants be told about the study? Will any information on procedures or the purpose of study be withheld?**

*Notes: Include an Information Sheet that sets out the purpose of the study and what will be required of the participant as appendices and refer to it as appropriate. If any information is to be withheld, justify this decision. More than one Information Sheet may be necessary.*

Participants will be advised that the study is an online study, being undertaken as part of Elizabeth's dissertation for her Msc. Family and Child Psychology degree, at the University of Chester. Participants will also be advised that the results of the study may additionally be published within a journal. Participants will be advised that the study is an academic piece of research investigating the public's perceptions of vulnerable witnesses, specifically children with autism spectrum condition. They will be advised that the purpose of the study is to obtain information on how vulnerable witnesses are viewed by individuals who have the potential to be jurors themselves within the criminal justice system. See appendix A.

Participants at the beginning of the study, will not be advised that the data will be analysed to provide further understanding as to whether potential jurors views of individuals with autism spectrum condition, have the ability to impact on their decisions in regards to witnesses with autism spectrum condition within the criminal justice system. This information will be withheld at this point, so not to influence participant's decision making whilst responding to the statements, within the questionnaires. It is suggested that if the participants are aware at the beginning of the study that the data will be examined for potential prejudices held and how these may impact on their decision making if they were a juror themselves, then they may not answer the statements truthfully. Additionally participants may try to provide answers that they feel may be viewed as more socially accepted.

However participants will be advised at the end of the study that the research aims to identify and assist in the eradication of social prejudice's that may be held by individuals who have the potential to be jurors, towards vulnerable witnesses, specifically children with autism spectrum condition. See appendix E.

Additionally participants will be provided with Elizabeth's and Dr Michelle Mattisons email addresses, that they can use to contact them if they have any questions, problems or complaints in regards to the study.

**Question 15: Will personally identifiable information be made available beyond the research team (e.g. report to organisation)?**

*Notes: If so, indicate to whom and describe how confidentiality and anonymity will be maintained at all stages.*

No.

**Question 16: What payments, expenses or other benefits and inducements will participants receive?**

*Notes: Give details. If it is monetary say how much, how it will be paid and on what basis is the amount determined. Indicate RPS credits.*

There are no direct benefits as such for participants who partake in this study. However participants who are students at the University of Chester will be awarded 2 RPS credits. Additionally, participants will be advised that they will be enabling Elizabeth to carry out the identified research and intern provide her with data to analyse for the purposes of her dissertation and potential publication. See appendix A.

**Question 17: At the end of the study, what will participants be told about the investigation?**

*Notes: Give details of debriefings, ways of alleviating any distress that might be caused by the study and ways of dealing with any clinical problem that may arise relating to the focus of the study.*

Participants will be advised at the end of the study that the research aims to identify and assist in the understand of social prejudice's that may be held by individuals who have the potential to be jurors, towards vulnerable witnesses, specifically children with autism spectrum condition. This wasn't emphasised at the beginning of the study so to attempt to avoid participants providing answers to the statements that they perceive as socially acceptable.

Participants will be provided with information on support available through the National Autistic Helpline, and for students the University of Chester Student Support, if they have been affected by participating in the study due to having an autism spectrum condition themselves or knowing someone who does.

It will also be highlighted that there are no right or wrong answers to the statements within the study and that participant's views and opinions will not be used to identify them.

The debrief sheet will additionally thank the participants for taking part in the study, and highlight again who it was conducted and supervised by as well as that data will remain anonymous and will be stored and securely in a password protected computer and file, that only the research team has access to. Additionally participants are reminded again that the data will be confidentially destroyed after March 2022.

Additionally participants will be provided again with Elizabeth's and Dr Michelle Mattisons email addresses, that they can use to contact them if they have any questions, problems or complaints in regards to the study. See appendix E.

**Question 18: What arrangements are there for data security during and after the study?**

*Notes: Digital data stored on a computer requires compliance with the Data Protection Act; indicate if you have discussed this with your supervisor and describe any special circumstances that have been identified from that discussion. Say who will have access to participants' personal data and for how long personal data will be stored or accessed after the study has ended.*

Elizabeth and Dr Michelle Mattison discussed compliance with University regulations (including the Data Protection Act) and how data will be stored and destroyed confidentially, in supervision held on 22.02.17. It was agreed that all data will be stored electronically in a password protected file that can only be accessed by Elizabeth and Dr Michelle Mattison. Additionally, it was agreed that the file would only be saved on password protected computers, which only Elizabeth and Dr Michelle Mattison have access to. It was discussed and agreed that all data would remain confidential and anonymous in accordance with the Data Protection Act and the University of Chester's research policies. Additionally, it was agreed that the data file would be confidentially destroyed in March 2022, this taking into account time for confirmation of academic assessment as well as the specified time period data has to be kept for after publication. Information in regards to ensuring the security of the data will also be made available to participants before and after completion of the study. See appendix A & E.

**Signatures of the study team (including date)**

*Notes: The primary applicant and all co-applicants must sign and date the form. Scanned or electronic signatures are acceptable.*

Elizabeth Taylor 8<sup>th</sup> March 2017

**ETHICS COMMITTEE DATE: 23/3/17****CHAIRS COMMENTS:**☒ Read and address all reviewers comments

- ① Recruitment contingency needed in case 60 participants can't be recruited through Facebook.
- ② Details about analysis are required.
- ③ Information sheet need help lines adding and typo correcting.
- ④ The Chair of Ethics committee's details do not need to be added to the info sheet & debrief.

**ACCEPTABLE**

- ☐ Action: You may now commence with data collection subject to approval from any relevant external agencies.

**DATA COLLECTION IS NOT PERMISSABLE UNDER THESE CONDITIONS**

- ☒ ACCEPTABLE SUBJECT TO SUBMISSION OF AMENDMENT FORM
- ☒ Acceptable subject to conditions listed by chair. Discuss conditions highlighted with supervisor and submit ethics application amendment form direct to office.
- ☐ Acceptable subject to conditions listed by chair: Submit ethics application amendment form direct to office.


**ACCEPTABLE SUBJECT TO CONDITIONS LISTED BY CHAIR:**

- ☐ Action: Resubmit application for full review ensuring you have completed section B

**REVISE AND RESUBMIT:**

- ☐ Action: Resubmit application for full review ensuring you have completed section B

SIGNATURE: .....



**Appendix A****Public Perception of Witnesses with Autism Spectrum Condition****PARTICIPANT INFORMATION SHEET**

*I would like to invite you to participate in an online research study as part of my Dissertation for my Msc. Family and Child Psychology degree, at the University of Chester. Please read this participant information sheet before deciding whether you would like to participate in the study or not. It is important that you understand why I am carrying out the research and what it is comprised of. Please could I ask that you take your time to read the information carefully and ensure you feel you have understood and have enough information to make your decision whether you wish you proceed. If you require any more information, please contact me using the details below. Please be advised that you do not have to take part in this research if you do not want to.*

*Thank you for your time.*

**What is the purpose of the study?**

This is an academic study investigating the public's perceptions of vulnerable witnesses, specifically children with autism. The purpose is to obtain information on how vulnerable witnesses are viewed by individuals who have the potential to be jurors themselves within the criminal justice system. The data, which will remain anonymous, will be analysed to provide further understanding of how vulnerable witnesses may be perceived by potential jurors.

**Why have I been chosen to take part?**

You have been chosen to take part in this study as you are over the age of 18.

**What do I have to do?**

You will be asked initially to complete a questionnaire that comprises of 26 statements, requiring you to determine how likely you agree or disagree, utilising the Likert scale provided. On completion of this stage, you will then be asked to read four short interview transcripts. The transcripts are the recall of events from children (some of whom will have autism). The transcripts are based on a non-violent shop theft video that the children watched. After reading each transcript, you will be asked to respond 16 statements, advising how credible you consider the witness to be. You will need to decide whether you agree or disagree with the statements using the Likert scale provided.

You are not obliged to answer all the questions, however questionnaires that are partially completed may still be used for data analyses.

It should take you no longer than 30 minutes to complete this study.

**Who is conducting the study?**

I will be analysing the data which will contribute to my dissertation and may be used for publication in a journal thereafter. If you have any questions, problems or complaints regarding the study please contact myself (Elizabeth Taylor) [1612054@chester.ac.uk](mailto:1612054@chester.ac.uk), or my Research Dissertation Supervisor, Dr Michelle Mattison, [m.mattison@chester.ac.uk](mailto:m.mattison@chester.ac.uk).

**Is participation voluntary?**

Your participation in this study is entirely voluntary. You do not have to take part, and can choose to withdraw from the study at any point whilst completing it by closing down your browser, without giving any reason. Please be aware that your responses may be analysed if you withdraw from the study partway through. Please be advised once you have completed and submitted your answers to the questionnaire, you will not be able to request your answers be withdrawn as they will be automatically anonymised and unidentifiable alongside other participants responses.

What are the risks/benefits of taking part in the study?

You will not be exposed to any direct harmful effects by participating within this study. However if you find you have been affected by participating in the study due to having autism spectrum condition or due to knowing someone with autism spectrum condition, please contact the below helpline for further information, guidance and support.

*The National Autistic Helpline: 0808 800 4104*  
Monday-Thursday: 10.00 to 16.00, Friday: 09.00 to 15.00

Please be advised that there are no right or wrong answers to the statements within this study, and your views and opinions will not be used to identify you.

The benefits of this study is that you will enable me to carry out the identified research, and intern provide me with data to analyse for the purposes of my dissertation and potential publication. Though there will be no direct benefits to yourself for completing this study, if you are a student at the University of Chester, you will receive two RPS credits.

What about confidentiality?

All information with this study is strictly confidential and will only be used for the purposes of academic assessment. All your answers will be completely anonymous and will be stored securely. If you wish to reduce the risk of individuals around you seeing your answers, ensure you exit the browser appropriately after submitting your answers.

Data will be stored according to the Data Protection Act and the University Research Policies. Once analysis is completed, data will be kept in a password protected file and will be confidentially destroyed after academic assessment and publication in March 2022.

What about the results?

The results from this study will be used for academic assessment purposes, in completion of my Research Dissertation. Additionally the results of this study may be used for publication within a journal. Participants will not be able to be identified within any part of my Research Dissertation or if the research is published, as all answers will be anonymised once pooled. Due to all data being anonymous, individual feedback will not be available.

What if I am unhappy or if there is a problem?

If you find yourself unhappy with this study or believe there is a problem, please contact my Supervisor, Dr Michelle Mattison, m.mattison@chester.ac.uk.

Ethical Approval

Ethical approval for the study has been sought and obtained from The Department of Psychology Ethics Committee.

**If you would like to take part, please read and confirm that you agree with the following statements:**

- I am over the age of 18 years old
- I understand what my participation involves



- I understand that my participation is entirely voluntary and that I can withdraw at any time

**Please be aware by clicking 'next' you have consented to take part in this study. If you have read the information and you do not wish to take part, please exit the browser.**



## Appendix B

Table 1: Societal Attitudes towards Autism scale

Statements	Likert Scale				
	Strongly Agree	Agree	Agree Somewhat	Undecided	Disagree Somewhat Disagree Strongly
People with autism should not engage in romantic relationships					
People with autism should have the opportunity to go to college					
People with autism should not have children					
People with autism should be institutionalised for their safety and others					
If a facility to treat people with autism opened in my community, I would consider moving out					
Individuals with autism are incapable of living on their own					
I would be afraid to be around a person with autism					
A person with autism is an emotional burden to his/her family					
I would be comfortable sitting next to a person with autism in the same class					
A person with autism is a financial burden to his/her family					
People with autism should be encouraged to marry someone with autism					
People with autism are incapable of forming relationships and expressing affection					
Children with autism should be fully integrated into mainstream classes					
I would be uncomfortable hugging a person with autism					
People with autism cannot understand other people's feelings					
Students with autism who are mainstreamed into regular classrooms are a distraction to students without autism in that classroom					
People with autism require additional support to be successful in the work place					
People with autism tend to be violent					
Mainstreaming children with autism into regular education classrooms poses a safety risk for children without autism in the same classroom					
People with autism need assistance communicating with others					
All individuals with autism demonstrate repetitive behaviours, such as rocking or flapping of arms or hands					
I would be comfortable sharing an office with a co-worker with autism					
I would be comfortable sitting next to a person with autism in a movie theatre					
I would be comfortable having a person with autism living in the same building as me					
I would be comfortable having a friend with autism					
People with autism are capable of living normal lives (i.e., with a job, house, family, etc)					

Note: Scale modified from Flood, Bulgrin, & Morgan, (2013)

## Appendix C

**Interview 1**

I: So it's recording our voices now. Can I just check that it's okay for me to record our voices?

M: Yeah

I: Okay, so what I would like you to do, is think very carefully about the video that you watched earlier on the iPad and I would like you to tell me everything that happened on it, starting from the beginning. Now what's important, I only want you to tell me the things that you actually remember, so if there's anything that you're not sure about, I don't want you to guess or make anything up for it. It's okay to say when you can't remember

M: Some cars drive past. A police car. Then people were walking round a corner. Walked into a shop, stole something and then this man was chasing them

I: Is there anything else that you can remember from the video or have you told me everything?

M: That's everything

I: Okay, that's great, thank you... You said that there was cars driving past. Tell me what you can remember about the cars driving past?

M: I can't really remember

I: Okay, thank you... Tell me what you can remember about the police car?

M: This man and woman came out of the shop and they were running and this man was running after them

I: Okay... Tell me about the man and the woman?

M: The man had short hair and the woman had long hair

I: Okay... Tell me what they looked like?

- M: They were robbers
- I: Robbers, right... Okay and you said that they went round a corner and into a shop. Tell me about the shop?
- M: They walked in and they stayed in there for a few minutes and they came out. I don't know what they stole, but they were running
- I: Tell me what the shop looked like?
- M: The shop was a small like paper newsagents shop
- I: Okay... Is there anything else that you can remember about the shop?
- M: No, that's everything
- I: Okay... You said that a man chased the people out of the shop. Tell me about that man?
- M: This man came out the shop and run after them
- I: Tell me what he looked like?
- M: The man had quite, like he was bald
- I: Okay... Is there anything else that you can remember about the man or the video?
- M: I've told you everything
- I: Okay, well thank you very much

**END OF INTERVIEW**

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**Interview 2**

I: So is it okay if I record our voices?

F: Yeah

I: Okay, so what I'd like to do now, is a little bit of talking about the video that you watched, but before you start, I just want to know that I only want you to tell me the things that you actually remember. I don't want you to guess or make anything up. So think about that video that you watched earlier on the iPad, and starting from the very beginning, tell me everything that you can remember about it?

F: Some cars going down the street and a roundabout, and two people going into a shop, and getting chased out

I: Is there anything else that you can remember?

F: They'd probably stolen something

I: Is there anything else that you can remember?

F: It was a tuck shop

I: Yeah...

F: Erm... Was it a man and a woman, I don't know...

I: When was that?

F: Who went into the shop

I: Oh okay... Is there anything else?

F: No, I don't think so

- I: That's absolutely fine, thank you... So you said at the beginning that there was some cars going down the street. Tell me what you can remember about the cars?
- F: Erm...
- I: So just what you can remember...
- F: There was a red car
- I: Okay... You said that they were going down the street. Tell me about the street?
- F: It was quite quiet... Erm...
- I: Tell me about the roundabout?
- F: I'm not sure...
- I: That's fine... And you said that two people went into a shop and you think it might have been a man and a woman. Tell me what you can remember about the man?
- F: I can't really remember
- I: What about the other person?
- F: I think they were wearing a hat
- I: Okay... Is there anything else?
- F: Shorter
- I: Okay... Is there anything else?
- F: Not really

I: Okay... You said that they went into a shop and you think it said tuck shop on the window. Tell me what the tuck shop looked like?

F: I think it was purple. I can't remember much

I: You think it was purple. Is there anything else that you can remember about it?

F: Erm... Not really

I: That's fine... You said that some people got chased out. Tell me what happened?

F: Erm... They went inside and a man was like running after them

I: Okay... Tell me what you can remember about the man that was running after them

F: He might have been bald, I can't really remember

I: Is there anything else?

F: No

I: Is there anything else about the video that you want to tell me?

F: No, not really

I: Okay, thank you so much, you've been really helpful

**END OF INTERVIEW**

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**Interview 3**

- I: So we're recording now. Is it okay if I record our voice?
- M: Yeah, sure
- I: So what I'd like you to do, is think about the video that you watched outside, and tell me everything that you can remember about it, starting from the beginning, but what I don't want you to do, is guess, or make anything up. I only want you to tell me just what you actually remember
- M: Okay
- I: So starting from the beginning...
- M: There was a police car. Around a roundabout, there were several red and silver cars. A cyclist went past. Two teenagers walked from around the corner and entered a tuck shop. It had a Walls ice cream sign, outside. They were in there for about 10 seconds, then were chased out by, I guess the shop owner, and that was about it
- I: Okay... Is there anything else that you can remember?
- M: Erm... Not really
- I: Okay, thank you. So you said at the beginning, that there was a police car that went past. Tell me about the police car?
- M: It was driving as normal and the sirens weren't on. I don't know, it was florescent yellow and blue
- I: Is there anything else that you can remember about it?
- M: The teenagers, one was wearing a jacket and the other was wearing a hoodie
- I: Okay, so earlier, you said that there was a roundabout with cars going round it and some were red and some were silver. Tell me about the roundabout?

- M: There were flowers in the middle, I think. I think there were signs pointing left in that direction. Yeah, that's pretty much it
- I: Okay, and you said that there were some cars. Tell me about the cars?
- M: Erm... There were several vans, can't remember what type. I think one was a Citroen. That's pretty much it
- I: Okay... You said that there was a cyclist. Tell me about the cyclist?
- M: Erm.. He had his helmet on. Seemed like a (inaudible). I think he was wearing a fluorescent vest?
- I: Okay... Is there anything else that you can remember about the cyclist?
- M: Not really
- I: Okay... And then you said that two teenagers walked from around the corner. Tell me about that bit?
- M: It was a standard corner. They just walked round, coming up to the roundabout, so just before. Once they walked around the corner, they walked about 20 feet
- I: So think about the first teenager and tell me everything that you can remember about that person
- M: He was wearing a hoodie. He had the hood down. Yeah, that's about it
- I: Okay... What about the second teenager. Tell me about the second teenager?
- M: It looked like, more like a girl. She was wearing a jacket type thing. It was open at the front. I can't remember what was on it
- I: Is there anything else that you can remember about the two teenagers?
- M: Just that they walked in the store



- I: Okay... You said that the shop that they went into was a tuck shop. Tell me what you can remember about the shop?
- M: It was blue with glass windows on the front. It had a single step up. Not much else
- I: Okay... And you said that there was a Walls ice cream sign outside. Tell me about that?
- M: It was one of them things that flaps in the wind, on a lead base type thing
- I: Okay
- M: It goes up
- I: Okay... And you said that the teenagers went into the shop for a bout 10 seconds and they were chased out. Tell me about that bit?
- M: They left in a hurry and the shop keeper was chasing them
- I: Okay... Then what happened?
- M: They went back round the corner
- I: Okay... Tell me about the shop keeper?
- M: He was quite large. It looked like he was wearing a sweater. He had his sleeves rolled up to about his elbow. That's about it
- I: Okay... Is there anything else that you can remember about the video?
- M: No, not really
- I: Okay, well thank you very much. That was very helpful

**END OF INTERVIEW**

#### Interview 4

- I: Is it all right if I record our voices?
- F: (nods)
- I: Is it okay if you talk, as the recorder can't hear you when you nod
- F: Yeah
- I: Thank you, that's very kind of you. What I'd like us to do now, is a little bit of talking about the video that you watched on the iPad... So just like before, when I asked you some questions on the picture game, and you didn't know the answer, you said 'I don't know'. I want you to do the same for this bit. I just want you to tell me what you actually remember, okay
- So thinking about the video, tell me everything that you can remember, starting from the beginning?
- F: First I saw some cars going past and then I saw two men come round a corner and go into a shop. The two men ran out with a third man running after them
- I: Okay... Is there anything else that you can remember?
- F: No
- I: No, okay. You've told me lots of things there, thank you... You said that some cars were going past at the beginning. Tell me about the cars?
- F: It was quite a lot of them
- I: Can you remember anything about them, or what they looked like?
- F: They were all different colours
- I: Okay

- F: I can't remember anything else
- I: Okay... Thank you for trying. And you said that two men came from around the corner. Tell me about the two men that came round the corner on the video
- F: (pause)
- I: Just what you can remember...
- F: I can't really remember
- I: That's okay... And you said that they went into a shop. Can you remember anything about the shop?
- F: It was a little one joined up to lots of others
- I: Okay... Tell me what it looked like
- F: I think it was blue
- I: Hmmm mmmm
- F: And I can't remember anything else
- I: That's okay. You've told me lots of things so far... You said that they came running out, and there was a third man running after them. Tell me about that bit?
- F: I think he was quite angry with them coming in
- I: Okay... Tell me about the third man. What did he look like?
- F: I think he was bald
- I: Okay...
- F: And I think he was telling them off for coming in

I: Okay, is there anything else that you can remember about him?

F: No

I: Is there anything else that you can remember about the video?

F: No

I: No, okay, thank you for your help. I'm going to stop recording our voices now

**END OF INTERVIEW**

**Appendix D****Table 2: Statements rating the witness via 8 credibility characteristics**

Credibility characteristics	Likert Scale				
	Strongly Agree	Agree	Agree Somewhat	Undecided	Disagree Somewhat Disagree Strongly Disagree
<b>Truthfulness</b>					
The witness appeared to be telling the truth					
The witness was telling lies					
<b>Credibility</b>					
The witness appeared to be credible in their responses and answers					
The witness didn't appear to respond with credible answers or statements					
<b>Accuracy</b>					
The witness appeared to give accurate responses and descriptions					
The witness didn't appear to accurately recall the situation and descriptions					
<b>Honesty</b>					
The witness seemed to be honest					
The witness seemed dishonest					
<b>Believability</b>					
The witness was believable					
The witness didn't appear believable					
<b>Competency</b>					
The witness appeared competent in their responses					
The witness seemed incompetent at responding					
<b>Confidence</b>					
The witness appeared confident in what they were saying					
The witness appeared uncertain in their responses					
<b>Capability</b>					
The witness appeared capable of answering the questions					
The witness didn't appear capable of answering in answering the questions					

*Note: Characteristics modified from Henry, Ridley, Perry, & Crane, (2011) and Stobbs & Kebbell, (2003)*

## Appendix E



### Debrief Sheet

Thank you very much for taking part in this study, your time is greatly appreciated. This study was conducted by Elizabeth Taylor and supervised by Dr Michelle Mattison.

This was an academic study investigating the public's perceptions of vulnerable witnesses, specifically children with autism, as witnesses within a criminal justice context. The purpose was to obtain information on how vulnerable witnesses would be viewed by individuals, who have the potential to be jurors themselves within the criminal justice system.

This study aims to identify and assist in the eradication of social prejudices that may be held by individuals who have the potential to be jurors, towards vulnerable witnesses, specifically children with autism.

The data will remain anonymous, and will be analysed to provide further understanding of how vulnerable witnesses may be perceived by potential jurors, therefore we will be unable to provide individual feedback on none of the questionnaires. All results will remain anonymous and will not be singled out at any point.

As per the Data Protection Act and the University of Chester's Research policies, data will be kept securely, and all data will be kept in a password protected file, and confidentially destroyed in March 2022.

If you find you have been affected by participating in this study due to knowing someone with autism, please contact the below helpline for further information, guidance and support.

The National Autistic Helpline: 0808 800 4104

Monday-Thursday: 10.00 to 16.00, Friday: 09.00 to 15.00

If you are a student at the University of Chester, further guidance and support may also be sought from the Student Support Centre.

Email: [student.support@chester.ac.uk](mailto:student.support@chester.ac.uk)

Tel: 01244 511550

**Please be advised that there are no right or wrong answers to the statements within this study, and your views and opinions will not be used to identify you.**

If you have any questions, problems or complaints regarding this study please contact myself; 1612054@chester.ac.uk, or my Research Dissertation Supervisor, Dr Michelle Mattison, m.mattison@chester.ac.uk.

**Thank you for your time and support in completing this study.**

**Appendix F****Statement of participant recruitment on Facebook**

"Hi Everyone,

As you all know, I am currently completing my Msc. Family & Child Psychology at the University of Chester.

I am currently starting my dissertation, which aims to investigate the public's perceptions of vulnerable witnesses, specifically children with autism spectrum condition.

If you would like to take part in the online study, please could I ask that you private message me so I can forward you the URL.

The study should take no longer than 30 minutes.

I would be grateful for your support.

Thank you kindly,

Liz Taylor"

### **Guidance Notes / Advice on completing the ethical considerations aspects of a programme of research**

#### **Consent**

Informed consent must be obtained for all participants before they take part in your project. The form should clearly state what they will be doing, drawing attention to anything they could conceivably object to subsequently. It should be in language that the person signing it will understand. It should also state that they can withdraw from the study at any time and the measures you are taking to ensure the confidentiality of data. If children are recruited from schools you will require the permission, depending on the school, of the head teacher, and of parents. Children over 14 years should also sign an individual consent form themselves. If conducting research on children you will normally also require Criminal Records Bureau clearance. You will need to check with the school if they require you to obtain one of these. It is usually necessary if working alone with children, however, some schools may request you have CRB clearance for any type of research you want to conduct within the school. Research to be carried out in any institution (prison, hospital, etc.) will require permission from the appropriate authority.

#### **Covert or Deceptive Research**

Research involving any form of deception can be particularly problematical, and you should provide a full explanation of why a covert or deceptive approach is necessary, why there are no acceptable alternative approaches not involving deception, and the scientific justification for deception.

#### **Debriefing**

How will participants be debriefed (written or oral)? If they will not be debriefed, give reasons. Please attach the written debrief or transcript for the oral debrief. This can be particularly important if covert or deceptive research methods are used.

#### **Withdrawal from investigation**

Participants should be told explicitly that they are free to leave the study at any time without jeopardy. It is important that you clarify exactly how and when this will be explained to participants. Participants also have the right to withdraw their data in retrospect, after you have received it. You will need to clarify how they will do this and at what point they will not be able to withdraw (i.e. after the data has been analysed and disseminated).

#### **Protection of participants**

Are the participants at risk of physical, psychological or emotional harm greater than encountered ordinary life? If yes, describe the nature of the risk and steps taken to minimise it.

#### **Observational research**

If observational research is to be conducted without prior consent, please describe the situations in which observations will take place and say how local cultural values and privacy of individuals and/or institutions will be taken into account.

#### **Giving advice**

Staff should not put themselves in a position of authority from which to provide advice and should in all cases refer participants to suitably qualified and appropriate professionals.

#### **Research in public places**



You should pay particular attention to the implications of research undertaken in public places. The impact on the social environment will be a key issue. You must observe the laws of obscenity and public decency. You should also have due regard to religious and cultural sensitivities.

### **Confidentiality/Data Protection**

You must comply with the Data Protection Act

- It is very important that the Participant Information Sheet includes information on what the research is for, who will conduct the research, how the personal information will be used, who will have access to the information and how long the information will be kept for. This is known as a 'fair processing statement.'
- You must not do anything with the personal information you collect over and above that for which you have consent.
- You can only make audio or visual recordings of participants with their consent (this should be stated on the Participant Information sheet)
- Identifiable personal information should only be conveyed to others within the framework of the act and with the participant's permission.
- You must store data securely. Consent forms and data should be stored separately and securely.
- You should only collect data that is relevant to the study being undertaken.
- Data may be kept indefinitely providing its sole use is for research purposes and meets the following conditions:
  - The data is not being used to take decisions in respect of any living individual.
  - The data is not being used in any which is, or is likely to, cause damage and/or distress to any living individual.
- You should always protect a participant's anonymity unless they have given their permission to be identified (if they do so, this should be stated on the Informed Consent Form).
- All data should be returned to participants or destroyed if consent is not given after the fact, or if a participant withdraws.

### **Animal rights**

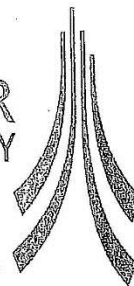
Research which might involve the study of animals at the University is not likely to involve intrusive or invasive procedures. However, you should avoid animal suffering of any kind and should ensure that proper animal husbandry practices are followed. You should show respect for animals as fellow sentient beings.

### **Environmental protection**

The negative impacts of your research on the natural environment and animal welfare, must be minimised and must be compliant to current legislation. Your research should appropriately weigh longer-term research benefit against short-term environmental harm needed to achieve research goals.

Applicant: Michelle Mattison  
Supervisor: Dr Coral Dando  
Department: Psychology

LANCASTER  
UNIVERSITY



12 February 2013

Dear Michelle and Coral,

**Re: The efficacy of the sketch mental reinstatement of context technique as an episodic retrieval tool for use during investigative interviews with children**

Thank you for submitting your research ethics application for the above project for review by the Department of Psychology Ethics Committee. The application was recommended for approval by the Department Committee, and on behalf of the Chair of the University Research Ethics Committee (UREC), I can confirm that approval has been granted for this research project.

As principal investigator your responsibilities include:

- ensuring that (where applicable) all the necessary legal and regulatory requirements in order to conduct the research are met, and the necessary licenses and approvals have been obtained;
- reporting any ethics-related issues that occur during the course of the research or arising from the research to the Research Ethics Officer (e.g. unforeseen ethical issues, complaints about the conduct of the research, adverse reactions such as extreme distress);
- submitting details of proposed substantive amendments to the protocol to the Research Ethics Officer for approval.

Please contact the Research Ethics Officer, Debbie Knight (01524 592605 [ethics@lancaster.ac.uk](mailto:ethics@lancaster.ac.uk)) if you have any queries or require further information.

Yours sincerely,

Yvonne Fox  
Research Support Manager

Cc: Professor T McMillan, Chair, Sarah Taylor Secretary, University Research Ethics Committee, Professor Tom Ormerod

Research Ethics  
Research Support Office  
Research and Enterprise Services

Lancaster University  
Bowland Main  
Lancaster LA1 4YT  
United Kingdom

Tel: +44 (0) 1524 592002  
Fax: +44 (0) 1524 593229  
Web: <http://www.lancs.ac.uk>

### **Departmental Ethics Application Form**

#### ***Applicant Information***

**Name of Researcher:** Michelle Mattison

**Level:** PhD

**Supervisor/ PI:** Dr. Coral J. Dando

**Contact details for correspondence:** [m.mattison@lancaster.ac.uk](mailto:m.mattison@lancaster.ac.uk)

#### ***Project Information***

##### **Project Title:**

The efficacy of the Sketch Mental Reinstatement of Context technique as an episodic retrieval tool for use during investigative interviews with children.

##### **Aim(s) of the research project:**

This research will investigate the efficacy of the sketch mental reinstatement of context (Sketch MRC) procedure as a cognitive aid for improving the retrieval of episodic information from child witnesses and victims. The research will consider the following:

- The level of memorial information produced by participants.
- The accuracy and detail of such information.
- The efficacy of the sketch MRC versus the traditional *mental reinstatement of context* and a control technique (i.e. a retrieval interview conducted without aids).

##### **Background to the research:**

The Cognitive Interview (CI: Fisher & Geiselman, 1992) is advocated as one of the most effective interviewing techniques, and is widely utilised by police officers in England and Wales. One of the most significant components of the CI is the *mental reinstatement of context* (MRC) technique, which encourages the interviewee to mentally recreate the psychological and physical environment that existed at the time of encoding. However, previous literature suggests that this component is all too often poorly applied by police officers, and as a result, episodic memorial performance is often compromised (Dando, Wilcock, & Milne, 2009; Dando, Wilcock, Milne & Henry, 2009). In light of this, a modification of the MRC component of the CI has recently been developed, and has been found to improve the level and accuracy of memorial retrieval when applied to adults (Dando, Wilcock & Milne, 2009). This modification, known as the Sketch MRC, encourages witnesses to

create their own retrieval cues, by drawing a sketch plan or picture of the to-be-remembered event.

Research suggests that it is vulnerable people whom require the highest level of assistance in order for the most accurate and reliable evidence to be produced (Bull, 2010). Thus, the CI and the use of drawing have both been examined (in isolation) with child witnesses, producing largely successful results. Further, the use of both methods is recommended within government practice guidelines (Achieving Best Evidence, 2011). Conversely, the effectiveness of this recent modification (the Sketch MRC) with a younger population is unknown. As such, this research will investigate whether the application of the Sketch MRC can assist the episodic memorial performance of children and enhance the quality of information recalled.

#### **Methodology and Analysis:**

This research will employ a mock witness approach. Participants aged between 5 and 16 years will be asked to complete two diagnostic tasks, which will determine the child's level of functioning. These assessments are (i) the British Vocabulary Picture Scale (BVPS-III) and (ii) the Raven's Coloured Progressive Matrices (RCPM). The BVPS-III lasts approximately 10 minutes and assesses a child's receptive (comprehension) vocabulary. Each question requires the tester to say a word following which the child responds by selecting the picture (from four options) that best illustrates the word's meaning. The questions broadly sample words that represent a range of content areas such as actions, animals, toys and emotions and parts of speech such as nouns, verbs or attributes, across all levels of difficulty. The RCPM measures a child's ability to make sense and meaning out of complex visual displays: the ability to perceive new patterns and relationships, and to forge (largely non-verbal) constructs that make it easy to handle complexity. This test, which will take approximately 15 minutes, requires children to look at a series of pictures that contain geometric figures. One piece is missing from each picture, and the child must select the missing piece from six possible answers. These diagnostic tasks will be used purely to group participants, appropriately. No diagnostic/ performance information will be made available to the participants, the participant's parents/carers, or the participant's school.

A between subjects design will be employed with one independent variable, namely interview, with three levels, (i) Sketch MRC, (ii) Traditional Mental Reinstatement of Context (MRC), and (iii) No MRC (control). The dependent variable will be episodic memory performance as measured by the amount of information recalled and the accuracy of that information (although further analysis may take place). It is anticipated that approximately 30 participants will be tested in each condition (thus overall N=90).

Participants (whose parents have provided written permission for their child to take part in the research prior to their participation) will be tested individually, in one session on school premises. The participating schools have already agreed to allow this research to take place on their premises. They will first complete the BVPS-III, following which they will watch a short film lasting approximately one minute. This film, developed by Centrex (Central Police Training and Development Authority),

depicts a non-violent mock witness scene and will be viewed on a laptop computer and/or iPad. The event depicts a road with numerous cars passing by, and a row of shops. Two people are seen walking into one of the shops, and approximately 20 seconds later, these two people are seen running out of the shop, chased by a man (believed to be the shopkeeper). The video ends. No event(s) that take place inside the shop are shown to the viewer. After viewing the film, participants will be asked to complete the RCPM test, which will act as a distracter task, following which participants will be asked to answer some questions about the previously viewed film using one of the aforementioned retrieval tools or no retrieval tool. This will take approximately 10-15 minutes. For younger children, testing sessions will be broken down into two 20 – 30 parts (i.e., part one - watching the video stimuli and completing the BVPS; part two completing Ravens CPM and mock interview).

Protocols for each of the interview conditions are based upon the current UK investigative interview model phased approach (see Appendix A), and have already received UEC approval for a similarly structured PhD research study being conducted by the applicant and her supervisor with Autistic Spectrum Disorder children. All interviews are structured similarly, comprising the same number of recall attempts in the following order: (i) greet, (ii) rapport, (iii) explain, (iv) free recall, (v) questioning, and (vi) closure. Interviews differ only in the free recall phase, where the experimental manipulation takes place, as follows:

- 1) Sketch Plan MRC: This condition will involve participants being provided with paper and pencils, and being asked to draw a sketch or picture of what they saw on the video. Participants will be asked to describe their drawings to the interviewer as they draw.
- 2) MRC: The interviewer will encourage the participant to mentally reinstate environmental and personal context of the video that was watched, following which h/she will be asked to explain what they remember about the film.
- 3) No MRC (control): This *free recall* procedure will require participants to simply tell the interviewer all that they can remember about the video.

The following data will be collected for analysis:

- 1) Digital audio recordings of interviews, which will be transcribed and coded using a template method (see Memon et al., 1991).
- 2) Drawings produced within the Sketch MRC condition, however due to the exploratory nature of this research, the manner in which the drawings might be coded has yet to be decided.

### ***Participant Information***

#### **What participants will be used in the study?**

Children aged 5-16 years old.

**How many will be used?**

Approximately 90.

**How will participants be recruited?**

Schools in Shropshire (already recruited), the local schools database.

**Will a CRB check be required?**

Yes, for both the PhD student (obtained from Lancaster University in December 2011), and her supervisor (who already holds an enhanced CRB).

**How will participants give consent?**

This research will use the opt-in consent method, only. Accordingly, parent/guardians will be provided with an Information Sheet (see Appendix B) and a consent form to sign giving permission for their child to take part in the research (see Appendix C). Information sheets and Consent forms will be disseminated to parents by the headmasters/mistresses of the schools taking part in this study. Additionally, verbal consent will be obtained from all participating children (see Section 7 – this consent will be digitally audio recorded). Should a (child) participant withhold verbal consent, the researcher will terminate/not commence the data collection. Equally, once data collection has commenced, should a child indicate that he/she wishes to stop the session will be terminated.

**How will participants be debriefed?**

A debrief sheet will be provided to parents (see Appendix D), and children will be verbally debriefed.

**What steps will be taken to ensure the confidentiality of the data collected?**

The research will collect digital audio recordings of interviews conducted with participants. Throughout, participants will be referred to by their first name only. Additional personally identifiable details of the participants are unlikely to appear on the recordings. However, where they do, these details will be edited out, and also removed when audio files are transcribed. Furthermore, participants will each be assigned an identification number, which will be used to anonymise all electrical material and all hard copies of transcripts. The original audio recordings will be required for transcription and analysis, and thus, will be kept on a secure password-protected and encrypted external hard drive, which will be stored securely (in a locked filing cabinet) on Lancaster University premises. Only the research team will have confidential access to these hard drives, for the purpose of this research. Anonymised/edited audio files and transcripts will also be retained electronically password protected hard drives. Participants and parents will be given their

individual number prior to the participation. This will allow the research team to anonymise the data. The master list will be accessible by the researchers only.

Data will be stored on encrypted and password protected hard drives which will be held securely (in a locked filing cabinet) at Lancaster University, together with hard copies of interview transcripts and grouping measures (described in the Method and Analysis section of this application). All data will be destroyed 5 years post completion of the applicant's PhD.

Anonymised data will be used for research purposes, educational purposes, and academic dissemination (conferences and publications). All data (raw and anonymised) will be destroyed 5 years post completion of the applicant's PhD.

Please complete all sections by circling the appropriate answer.

### 1. Risks

Does this study involve a risk to participants' physical well being (e.g. use of substances such as alcohol or extreme situations such as sleep deprivation)?	YES	NO
Does this study involve a psychological risk to participants (e.g. cause emotional upset, worry, stress, fatigue, or embarrassment)?	YES	NO
Does this study involve any social risk to participants (e.g. loss of privacy, status or reputation)?	YES	NO
Does this study require participants to disclose information of a personal or sensitive nature (e.g. their ethnicity, religion, sexual orientation, political affiliation, or experience of violence or abuse)?	YES	NO
Does this study involve vulnerable participants or groups (e.g. prisoners, children, older or disabled people, victims of crime)?	YES	NO
Does this study require access to personal records or other sources of confidential information (e.g. medical, criminal, educational records)?	YES	NO
Does this study involve the use of intrusive interventions such as the administration of substances, or treatments such as hypnotherapy?	YES	NO
Does this study expose the participants or the researcher to any other risks different from those encountered in everyday life?	YES	NO

### 2. Consent

Will participants in this study be given written information outlining: a) the purpose of the study, b) what participants will be expected to do, c) individuals' right to refuse or withdraw at any time?	YES	NO	NA
Will participants be given the opportunity to ask questions about the study prior to agreeing to participate?	YES	NO	NA
Will permission be sought from any other source, if required, before commencing the research (e.g. from school or hospital)?	YES	NO	NA

### 3. Disclosure

Does this study involve covert methods?	YES	NO
Does this study involve the use of deception, either in the form of withholding essential information about the study, or intentionally misinforming participants about any aspects of the study?	YES	NO

### 4. Debriefing

Does this study include an opportunity for participants to ask questions and/or obtain general feedback about the study after they have concluded their part in it?	YES	NO	NA
---	-----	----	----



**5. Anonymity and confidentiality**

Is participation in the study anonymous?	YES	NO	
If anonymity has been promised, do the general procedures ensure that individuals cannot be identified indirectly (e.g. via other information that is taken)?	YES	NO	NA
Have participants been promised confidentiality?	YES	NO	NA
If confidentiality has been promised, do the procedures ensure that the information collected is truly confidential (e.g. that it will not be quoted verbatim)?	YES	NO	NA
Will data be stored in a secure place, which is inaccessible to anyone other than the researcher and members of the research team?	YES	NO	NA
If participants' identities are being recorded, will the data be coded to disguise identity before computer data entry?	YES	NO	NA

**6. Summary of ethical concerns**

If you have answered 'YES' to any of the questions in Section 1 (Risks), please tick the box	<input type="checkbox"/>
If you have answered 'NO' to any of the questions in Section 2 (Consent), please tick the box	NA
If you have answered 'YES' to any of the questions in Section 3 (Disclosure), please tick the box	NA
If you have answered 'NO' to any of the questions in Section 4 (Debriefing), please tick the box	NA
If you have answered 'NO' to any of the questions in Section 5 (Anonymity and confidentiality), please tick the box	NA

**7. Further details**

If you have ticked any of the boxes above in item 6 please identify and provide an account for the particular ethical issue(s) arising out of the proposed research and outline how this (these) concern(s) will be met in accordance with departmental ethical guidelines.

This research includes the participation of children aged 5-16 years old. Both the researcher and her supervisor have extensive experience of collecting such data, and a history of working with schools in Shropshire and Lancaster. As vulnerable participants the following measures are in place to ensure that the wellbeing of participants is protected at all stages of the proposed research are.

- The researcher and her supervisors have current enhanced CRB checks
- Permission will be granted for this research by the head teachers of the participating schools prior to parents of children being contacted
- A strict opt-in consent process will be used whereby parents will provide written consent for their children to take part in the research
- Participants will be asked to give verbal consent (which will be audio recorded). For example "Today I want to find out how much you can remember from a video that we will watch", "Would you like to do this with me?" It is anticipated that this may be easily understood by participants, and require only a 'yes' or 'no' response. Children will also be informed of their right to withdraw, similarly, using appropriate language. For example, "Tell me if you want to stop doing this work and go back to your class". This will enable the child to withdraw from before the start of the experiment or at any time during the session. Furthermore, in instances where avoidance of the testing situation is evident, the researcher will interpret this as a failure to consent to the procedure.
- For younger children, testing sessions will be broken down into two 20 – 30 parts (i.e., part one - watching the video stimuli and completing the BVPS; part two completing Ravens CPM and mock interview).
- Parents/guardians will be provided with an information sheet (see Appendix B), and parents/guardians will be debriefed (see Appendix D).

### 8. Declaration

Please confirm that you have read the BPS Code of Conduct and are willing to abide by it in relation to the current proposal.

**Student signature**

M. Mattison

**Date**

24 October 2012

**Project supervisor**

**Date**

*Grando*

29th Oct 2012

**Appendix A - Sketch RC & Free recall**

In a moment I would like you to tell me everything you can remember about the film you just watched

Before you tell me about the film, I would like you draw it for me

You can draw whatever you want, draw whatever reminds you about what happened in the film

Draw as much as you can

Take as much time as you would like, and as you draw I would like you to tell me what you are drawing

Do you want to add anything else to your drawing?

OK, well done, that is a great drawing

Now I would like you to tell me everything you can about the film – don't forget that I have never seen it, so it is VERY important that you tell me as much as you can

But don't guess

You can use your drawing to point things out/explain to me what happened if you want



Department of Psychology  
Lancaster University  
Fylde College  
Lancaster  
LA1 4YF

**Appendix B - Invitation for your child to take part in a research project  
investigating eyewitness memory**

My name is Michelle Mattison and I am a PhD student, conducting research within the Department of Psychology at Lancaster University. My work is focusing on eyewitness memory and how best to help young people to remember events they have seen. I am writing to ask you to allow your child to participate in this research, which will take place during school hours.

Should you allow your child to take part I will ask him/her to do some picture puzzles and word games, which will allow me to understand your child's language and understanding of pictures. These two activities will take no longer than 20 minutes. Following this, your child will then be asked to watch a short video (about one minute long). This video shows a road with some shops. Two people are seen walking into one of the shops, and 20 seconds later they are seen running from the shop being chased by a man. Following a short delay, your child will be asked questions about what they saw on the video. He/she may be asked to draw some pictures about what they saw. From start to finish, their participation will take no longer than one hour. Your child's responses will be paper and digitally audio recorded. These recordings will be anonymised and used for academic, educational and further research purposes only. No personally identifiable information (e.g. name) will be disclosed throughout this research.

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This is not a compulsory school activity, and individual pupil's results will not be discussed with other pupils or any teachers. This research has been designed to be enjoyable, and should you give consent, your child's

participation on the day is also voluntary. As such, should your child decline to take part, or ask to stop he/she may do so at any time, and their data will be removed from the study. To thank your child for taking part in this research, he/she will be offered a £5 Waterstones voucher.

I have completed a full CRB check, and will be supervised throughout my research by Dr. Coral Dando and Dr. Melissa Allen, who have also completed a CRB check.

Your child's participation is not compulsory. If **YOU DO** want your child to participate please complete the attached consent form and return it to your child's teacher as soon as possible.

If you would like any further information, please do not hesitate to contact me via:

- Telephone: 07815 724538 or
- Email: [m.mattison@lancaster.ac.uk](mailto:m.mattison@lancaster.ac.uk)

Alternatively, you may contact one of my supervisors:

- Dr. Coral Dando: [c.dando@lancaster.ac.uk](mailto:c.dando@lancaster.ac.uk) (Primary Supervisor)
- Dr. Melissa Allen [melissa.allen@lancaster.ac.uk](mailto:melissa.allen@lancaster.ac.uk) (Second Supervisor)
- Professor Charlie Lewis [c.lewis@lancaster.ac.uk](mailto:c.lewis@lancaster.ac.uk) (Head of Psychology Department).

I look forward to hearing from you.

Yours sincerely,

Michelle Mattison

---



Department of Psychology  
Lancaster University  
Fylde College  
Lancaster  
LA1 4YF

### Appendix C - Parental Consent form

**Project Title:** The efficacy of the Sketch Mental Reinstatement of Context technique as an episodic retrieval tool for use during interviews with mock witnesses.

**Researchers:** Michelle Mattison, Dr. Coral Dando and Dr. Melissa Allen

Thank you for your interest in our research here at Lancaster University. We would like permission to enrol your child as a participant in a research study. This study will examine memory and how children recall events, and what methods may enhance this recall. Please read and initial the following statements to demonstrate your understanding and agreement for your child to participate.

	Please Tick Box
1. I agree for my child to take part in the above research and understand what his/her role will be. All of my questions have been answered to my satisfaction, and my decision to give consent has been made of my own free will.	
2. I understand that my child can stop taking part in this study at any time and, if he/she chooses to do so, he/she does not have to explain why they are stopping.	
3. I acknowledge that my child will be audio recorded, and that recordings/transcriptions of recordings may be used for further research, educational or other related academic purposes, but that I, nor my child, will be identified at any time.	

Please sign on the line below. By doing so, you are agreeing for your child to take part in this study.

I, \_\_\_\_\_ (parent/guardian's name), give consent for

\_\_\_\_\_ (child's name) to participate in this study.

Parent/guardian's signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Please return to your child's class teacher or to the researcher.**



Department of Psychology  
Lancaster University  
Fylde College  
Lancaster  
LA1 4YF

#### Appendix D - Parental Debrief

**Title of Project:** The efficacy of the Sketch Mental Reinstatement of Context technique as an episodic retrieval tool for use during interviews with mock witnesses.

**Researcher:**

Michelle Mattison ([m.mattison@lancaster.ac.uk](mailto:m.mattison@lancaster.ac.uk) / 07815 724538).

**Supervisors:**

Dr. Coral Dando ([c.dando@lancaster.ac.uk](mailto:c.dando@lancaster.ac.uk)).

Dr. Melissa Allen ([melissa.allen@lancaster.ac.uk](mailto:melissa.allen@lancaster.ac.uk)).

Thank you for consenting to your child taking part in this study. I hope that your child found it both an interesting and enjoyable experience. Please keep this document, as it includes your child's personal participation number (see above), details of the research team.

Your child's participation involved your child taking part three activities. Two of which, aimed to measure your child's language ability and understanding of complicated pictures. The scores from these will be used to group all the participants into relevant groups during the analysis stage of this research.

The third activity, involved your child watching a video that lasted one minute, showing a road comprising of a small number of shops. Two people were seen walking into one of the shops, and 20 seconds later, were seen running from the shop, chased by a man. After a short delay, your child was asked questions about what they saw on the video. He/she may have been asked to draw some pictures about what they saw.

Your child's responses will be used to form part of a large data set, which will be used to help us understand more about how children create memories about that they see, and how best to help children recall these memories.

Your child's responses will be paper and digitally audio recorded. These recordings will be anonymised and used for academic, educational and further research purposes only. No personally identifiable information (e.g. name) will be disclosed throughout this research.

Please do not hesitate to contact me, or a member of the team if you have any queries or concerns, or if you decide that you want to withdraw your child's participation from the study (even after he/she has taken part). Please quote your child's participation number in all correspondence. This will enable me to locate your child's data.

If you would like to receive a copy of the findings of this research project, please complete the attached slip and return it to the address on the first page of this letter. Alternatively, you may wish you read one of the previous studies that have investigated this topic:

Dando, C., Wilcock, R., & Milne, R. (2009). The cognitive interview: The efficacy of a modified mental reinstatement of context procedure for frontline police investigators. *Applied Cognitive Psychology*, 23, 138-147.

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**Request for Findings of Research: The efficacy of the Sketch Mental  
Reinstatement of Context technique as an episodic retrieval tool for use  
during interviews with mock witnesses**

I would like to receive a copy of the overall findings of this research project.  
Please contact me by:

Email:

Post:

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University of  
Chester

**DEPARTMENT OF PSYCHOLOGY  
ETHICS REVIEW FORM**

**A) Applicant and submission details**

Name of applicant: Elizabeth Taylor

Project title: Public Perception of Witnesses with Autism Spectrum Condition

Applicant status: ☐ UG ☒ PGT ☐ PGR ☐ Staff

If you are the applicant's supervisor, have you discussed ethical issues with the applicant?

☐ Yes, the applicant is an UG/PGT student and I wish to send the application for accelerated student review.

☐ Yes, the applicant is a UG/PGT student and I wish to send the application for full review.

☐ Yes, the applicant is a PGR student and I wish to send the application for full review.

☐ No → Comments:

**B) Review of application**

**1. Has the applicant signed and dated the form?**

a) ☒ Yes ☐ No → Return to applicant for signature before continuing with review process.

**2. What is the submission type?**

a) ☒ First submission to this or any other committee

b) ☐ Resubmission of a rejected application by this committee

• Is there a summary of the requirements of the committee? Is the original application attached?: ☐ Yes ☐ No → Return to applicant for full details

c) ☐ Revised submission intended to replace an application approved by this committee

• Is the original application attached?: ☐ Yes ☐ No → Return to applicant for full details

d) ☐ First submission to this committee; has been submitted to another committee.

• Is the original application attached? ☐ Yes ☐ No → Return to applicant for full details

**3. Research Plan and Methodology**

a) Is the study well formulated in terms of drawing on the relevant literature and is it methodologically, analytically and scientifically sound?

☒ Yes ☐ No Comments:

b) Are the timescales provided appropriate?

☐ Yes ☐ No Comments: Form doesn't ask for this.

c) Are there contingency details?

☐ Yes ☐ No Comments: Form doesn't specifically ask for this.

d) Is there consideration of how to minimise, manage and monitor issues of distress and harm, however minor?

☒ Yes ☐ No Comments: [Click here to enter text.](#)

- e) Are appropriate debrief details provided?  
☒ Yes ☐ No Comments:

- f) Are appropriate details regarding the use and management of deception provided?  
☐ Yes ☐ No ☒ N/A Comments:

**4. Sample size, participants and recruitment**

- a) Has the applicant provided appropriate details of the sample and how it will be identified?  
☒ Yes ☐ No Comments:

- b) Has the applicant provided appropriate details of where the research will take place, including issues regarding permission and appropriate health and safety information? Is the necessary documentation attached?  
☒ Yes ☐ No Comments:

If the applicant is a taught student and they did not attend the mandatory H&S briefing have they provided appropriate evidence that they have full and satisfactory awareness of the relevant health and safety protocol?

☐ Yes ☐ No ☐ N/A Comments:

- c) Has the applicant provided appropriate details and attached the necessary documentation concerning their recruitment procedures? In particular, have they appropriately considered how to minimise, manage and monitor issues of distress and harm?  
☒ Yes ☐ No Comments:

Are there appropriate RPS credits? ☐ Yes ☐ No ☒ N/A

- d) Has the applicant provided appropriate details and attached the necessary documentation concerning the information made available to participants? In particular, are there appropriate considerations if using internet mediated research?  
☒ Yes ☐ No Comments:

Is there appropriate consideration of how to manage issues of distress and harm?

☒ Yes ☐ No Comments:

Are there appropriate details regarding informed consent?

☒ Yes ☐ No Comments:

Are there appropriate details regarding anonymity and confidentiality?

☒ Yes ☐ No Comments:

Are there appropriate details regarding withdrawal procedures?

☒ Yes ☐ No Comments:

- e) Are there appropriate details regarding time commitment from participants?  
☒ Yes ☐ No Comments:

- f) Are there appropriate details regarding compensation arrangements?  
☒ Yes ☐ No Comments:

g) If using social media for recruitment have details been provided on

a. Proposed sites and social groups?

☐ Yes ☐ No Comments:

b. Social media messages?

☐ Yes ☐ No Comments:

#### 5. Data Collection and Analysis

a) Has the applicant provided full procedural details and attached the necessary documentation concerning data collection procedures?

X Yes ☐ No Comments:

#### 6. Data Analysis

a) Has the applicant provided appropriate details concerning data analysis?

☐ Yes ☐ No Comments: Form doesn't ask for this information, but I have discussed this with the applicant as this is a study that I have designed.

#### 7. Data protection and Storage

a) Has the applicant provided appropriate details concerning data protection and storage? Have security issues been properly considered?

X Yes ☐ No Comments:

#### 8. Dissemination

a) Has the applicant provided appropriate details concerning research dissemination?

X Yes ☐ No Comments:

Are there appropriate details regarding how privacy and confidentiality will be maintained during dissemination?

X Yes ☐ No Comments:

Are there appropriate details regarding any specific considerations about sharing the research?

X Yes ☐ No Comments:

General comments: Good application in which all issues appear to have been addressed. Ethics form from Lancaster for original data collection (study where transcripts originated from) is attached.

#### Review status

☐ Chair's action

☐ Staff/PGR for full review

☐ Work with external agencies

☐ Other issues/concerns

☐ UG/PGT for full review

☐ Work with vulnerable participants

NAME: Michelle Mattison

X Supervisor ☐ Supervisor/Reviewer 1 ☐ Reviewer 1 ☐ Reviewer 2

DATE: 20/03/17



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**DEPARTMENT OF PSYCHOLOGY  
ETHICS REVIEW FORM**

**A) Applicant and submission details**

**Name of applicant:** Elizabeth Taylor

**Project title:** *Public Perception of Witnesses with Autism Spectrum Condition*

**Applicant status:** ☐ UG ☒ PGT ☐ PGR ☐ Staff

**If you are the applicant's supervisor, have you discussed ethical issues with the applicant?**

☐ Yes, the applicant is an UG/PGT student and I wish to send the application for accelerated student review.

☐ Yes, the applicant is a UG/PGT student and I wish to send the application for full review.

☐ Yes, the applicant is a PGR student and I wish to send the application for full review.

☐ No → Comments:

**B) Review of application**

**1. Has the applicant signed and dated the form?**

a) ☒ Yes ☐ No → Return to applicant for signature before continuing with review process.

**2. What is the submission type?**

a) ☒ First submission to this or any other committee

b) ☐ Resubmission of a rejected application by this committee

• Is there a summary of the requirements of the committee? Is the original application attached?: ☐ Yes ☐ No → Return to applicant for full details

c) ☐ Revised submission intended to replace an application approved by this committee

• Is the original application attached?: ☐ Yes ☐ No → Return to applicant for full details

d) ☐ First submission to this committee; has been submitted to another committee.

• Is the original application attached? ☐ Yes ☐ No → Return to applicant for full details

**3. Research Plan and Methodology**

a) Is the study well formulated in terms of drawing on the relevant literature and is it methodologically, analytically and scientifically sound?

☒ Yes ☐ No Comments: Generally yes. No details were provided as to the proposed

analysis, but this is something that can be discussed with the supervisor.

b) Are the timescales provided appropriate?

☒ Yes ☐ No Comments:

c) Are there contingency details?

☐ Yes ☒ No Comments: **No, but these are not explicitly asked for on the ethics form.**

d) Is there consideration of how to minimise, manage and monitor issues of distress and harm, however minor?

☒ Yes ☐ No Comments: *Click here to enter text.*

e) Are appropriate debrief details provided?

☐ Yes ☐ No

Comments:

f) Are appropriate details regarding the use and management of deception provided?

☐ Yes ☐ No ☒ N/A

Comments:

#### 4. Sample size, participants and recruitment

a) Has the applicant provided appropriate details of the sample and how it will be identified?

☒ Yes ☐ No

Comments:

b) Has the applicant provided appropriate details of where the research will take place, including issues regarding permission and appropriate health and safety information? Is the necessary documentation attached?

☒ Yes ☐ No

Comments:

If the applicant is a taught student and they did not attend the mandatory H&S briefing have they provided appropriate evidence that they have full and satisfactory awareness of the relevant health and safety protocol?

☐ Yes ☐ No ☐ N/A

Comments:

c) Has the applicant provided appropriate details and attached the necessary documentation concerning their recruitment procedures? In particular, have they appropriately considered how to minimise, manage and monitor issues of distress and harm?

☒ Yes ☐ No

Comments:

Are there appropriate RPS credits? ☐ Yes ☐ No ☐ N/A

d) Has the applicant provided appropriate details and attached the necessary documentation concerning the information made available to participants? In particular, are there appropriate considerations if using internet mediated research?

☒ Yes ☐ No

Comments: **There is a typo on the information sheet: '..and intern**

**provide me with data...' should be '..and in turn provide me with data'. The information sheet and debrief sheet should also provide the contact details (email address) for the Chair of the Ethics Committee and maybe could provide a link to a reputable web resource relating to autism.**

Is there appropriate consideration of how to manage issues of distress and harm?

☒ Yes ☐ No

Comments:

Are there appropriate details regarding informed consent?

☒ Yes ☐ No

Comments:

Are there appropriate details regarding anonymity and confidentiality?

☒ Yes ☐ No

Comments:

Are there appropriate details regarding withdrawal procedures?

☒ Yes ☐ No

Comments:

e) Are there appropriate details regarding time commitment from participants?

☒ Yes ☐ No

Comments: **I would suggest piloting the study to determine how long it would**

**take participants to complete all stages, including reading the information and debrief sheets. As there are four transcripts to read through, and then a scale to answer for each one, to complete the whole study may take longer than 30 minutes.**

- f) Are there appropriate details regarding compensation arrangements?  
☐ Yes ☐ No Comments:

- g) If using social media for recruitment have details been provided on  
 a. Proposed sites and social groups?  
☐ Yes ☐ No Comments:  
 b. Social media messages?  
☐ Yes ☐ No Comments:

5. **Data Collection and Analysis**

- a) Has the applicant provided full procedural details and attached the necessary documentation concerning data collection procedures?  
☐ Yes ☐ No Comments:

6. **Data Analysis**

- a) Has the applicant provided appropriate details concerning data analysis?  
☐ Yes ☒ No Comments: **No, but the scales used look appropriate and would produce suitable data. The details of data analysis can be discussed with the supervisor.**

7. **Data protection and Storage**

- a) Has the applicant provided appropriate details concerning data protection and storage? Have security issues been properly considered?  
☐ Yes ☐ No Comments: **Generally yes, although I am not sure why the data is being destroyed in March 2022. If the data is used as part of an academic publication, it should be kept indefinitely by the supervisor, as most journals require the data to be available on request to any other researchers who wish to see the original data.**

8. **Dissemination**

- a) Has the applicant provided appropriate details concerning research dissemination?  
☐ Yes ☐ No Comments:  
 Are there appropriate details regarding how privacy and confidentiality will be maintained during dissemination?  
☐ Yes ☐ No Comments:  
 Are there appropriate details regarding any specific considerations about sharing the research?  
☐ Yes ☐ No Comments:

General comments: **This is a well thought through application with ethical issues dealt with appropriately. There are just a few minor issues as identified above.**

**Review status**

- ☐ Chair's action  
☐ Staff/PGR for full review ☒ UG/PGT for full review

<input type="checkbox"/> Work with external agencies	<input type="checkbox"/> Work with vulnerable participants
<input type="checkbox"/> Other issues/concerns	

<b>NAME:</b> Sam Roberts			
<input type="checkbox"/> Supervisor	<input type="checkbox"/> Supervisor/Reviewer 1	<input checked="" type="checkbox"/> Reviewer 1	<input type="checkbox"/> Reviewer 2
<b>DATE:</b> 20/03/2017			





University of  
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**DEPARTMENT OF PSYCHOLOGY  
ETHICS REVIEW FORM**

**A) Applicant and submission details**

**Name of applicant:** Elizabeth Taylor

**Project title:** Public Perception of Witnesses with Autism Spectrum Condition

**Applicant status:** ☐ UG ☒ PGT ☐ PGR ☐ Staff

**If you are the applicant's supervisor, have you discussed ethical issues with the applicant?**

☐ Yes, the applicant is an UG/PGT student and I wish to send the application for accelerated student review.

☐ Yes, the applicant is a UG/PGT student and I wish to send the application for full review.

☐ Yes, the applicant is a PGR student and I wish to send the application for full review.

☐ No → Comments:

**B) Review of application**

**1. Has the applicant signed and dated the form?**

a) ☒ Yes ☐ No → Return to applicant for signature before continuing with review process.

**2. What is the submission type?**

a) ☒ First submission to this or any other committee

b) ☐ Resubmission of a rejected application by this committee

• Is there a summary of the requirements of the committee? Is the original application attached?: ☐ Yes ☐ No → Return to applicant for full details

c) ☐ Revised submission intended to replace an application approved by this committee

• Is the original application attached?: ☐ Yes ☐ No → Return to applicant for full details

d) ☐ First submission to this committee; has been submitted to another committee.

• Is the original application attached? ☐ Yes ☐ No → Return to applicant for full details

**3. Research Plan and Methodology**

a) Is the study well formulated in terms of drawing on the relevant literature and is it methodologically, analytically and scientifically sound?

☒ Yes ☐ No Comments:

b) Are the timescales provided appropriate?

☒ Yes ☐ No Comments:

c) Are there contingency details?

☐ Yes ☒ No Comments: 60 participants is quite a lot to recruit via facebook. Possibly consider broadening out the recruitment procedures.

d) Is there consideration of how to minimise, manage and monitor issues of distress and harm, however minor?

☒ Yes ☐ No Comments: *Click here to enter text.*

e) Are appropriate debrief details provided?

X Yes ☐ No Comments:

f) Are appropriate details regarding the use and management of deception provided?

X Yes ☐ No ☐ N/A Comments:

**4. Sample size, participants and recruitment**

a) Has the applicant provided appropriate details of the sample and how it will be identified?

X Yes ☐ No Comments: No mention of power analysis.

b) Has the applicant provided appropriate details of where the research will take place, including issues regarding permission and appropriate health and safety information? Is the necessary documentation attached?

X Yes ☐ No Comments:

If the applicant is a taught student and they did not attend the mandatory H&S briefing have they provided appropriate evidence that they have full and satisfactory awareness of the relevant health and safety protocol?

☐ Yes ☐ No ☐ N/A Comments:

c) Has the applicant provided appropriate details and attached the necessary documentation concerning their recruitment procedures? In particular, have they appropriately considered how to minimise, manage and monitor issues of distress and harm?

X Yes ☐ No Comments:

Are there appropriate RPS credits? X Yes ☐ No ☐ N/A

d) Has the applicant provided appropriate details and attached the necessary documentation concerning the information made available to participants? In particular, are there appropriate considerations if using internet mediated research?

X Yes ☐ No Comments:

Is there appropriate consideration of how to manage issues of distress and harm?

X Yes ☐ No Comments:

Are there appropriate details regarding informed consent?

X Yes ☐ No Comments:

Are there appropriate details regarding anonymity and confidentiality?

X Yes ☐ No Comments:

Are there appropriate details regarding withdrawal procedures?

X Yes ☐ No Comments:

e) Are there appropriate details regarding time commitment from participants?

X Yes ☐ No Comments:

f) Are there appropriate details regarding compensation arrangements?

X Yes ☐ No Comments:

g) If using social media for recruitment have details been provided on

a. Proposed sites and social groups?

X Yes ☐ No Comments: Facebook

b. Social media messages?

X Yes ☐ No Comments:

#### 5. Data Collection and Analysis

a) Has the applicant provided full procedural details and attached the necessary documentation concerning data collection procedures?

X Yes ☐ No Comments:

#### 6. Data Analysis

a) Has the applicant provided appropriate details concerning data analysis?

☐ Yes X No Comments:

#### 7. Data protection and Storage

a) Has the applicant provided appropriate details concerning data protection and storage? Have security issues been properly considered?

X Yes ☐ No Comments:

#### 8. Dissemination

a) Has the applicant provided appropriate details concerning research dissemination?

X Yes ☐ No Comments:

Are there appropriate details regarding how privacy and confidentiality will be maintained during dissemination?

X Yes ☐ No Comments:

Are there appropriate details regarding any specific considerations about sharing the research?

☐ Yes ☐ No Comments:

General comments: An interesting project, with no big ethical issues. There are a few issues that may need to be considered:

1) Recruitment: there are no contingency plans (this may be worth exploring as it may be difficult to recruit 60 people from Facebook alone. If this is to be advertised on the RPS page (which may be a good option for additional recruitment), an advert needs to be included.

2) There are no details listed regarding analysis

3) Recruitment numbers-possibly need a power analysis?

4) The Information sheet: Help-lines put at the end of the information sheet? Typo: intern should be in turn. Specify Psychology student for the RPS credits.

#### Review status

☐ Chair's action

☐ Staff/PGR for full review

X UG/PGT for full review

☐ Work with external agencies

☐ Work with vulnerable participants

☐ Other issues/concerns

NAME: Hannah Heath

<input type="checkbox"/> Supervisor	<input type="checkbox"/> Supervisor/Reviewer 1	<input checked="" type="checkbox"/> Reviewer 1	<input type="checkbox"/> Reviewer 2
DATE: 19.03.2017			

## Appendix H



University of  
Chester

UNIVERSITY OF CHESTER, DEPARTMENT OF PSYCHOLOGY  
APPLICATION FOR ETHICAL APPROVAL AMENDMENT FORM

## A) Applicant and personnel

Applicant: Elizabeth Taylor

Project title: Public Perception of Witnesses with Autism Spectrum Condition

Applicant status: ☐ Staff → Go to Section B ☒ PGR ☐ Undergraduate ☐ Postgraduate taught


Supervisor: Dr Michelle Mattison

## B) Declaration

1. ☒ I have submitted an application for ethical approval to the Department of Psychology Ethics Committee and I am required to make the following amendments to my application.  
List the recommendations of the committee. 1. Recruitment contingency needed in case 60 participants can't be recruited through Facebook. 2. Details about analysis are required. 3. Information sheet need help lines adding and typo correcting. 4. The Chair of Ethics committee's details do not need to be added to the info sheet & debrief. 5. I would suggest piloting the study to determine how long it would take participants to complete all stages, including reading the information and debrief sheets. As there are four transcripts to read through, and then a scale to answer for each one, to complete the whole study may take longer than 30 minutes. 6. Generally yes, although I am not sure why the data is being destroyed in March 2022. If the data is used as part of an academic publication, it should be kept indefinitely by the supervisor, as most journals require the data to be available on request to any other researchers who wish to see the original data.  
Describe how you have addressed these requirements. 1. I have addressed this comment by ensuring I have 'face to face' recruitment of participants as a contingency in case I am unable to recruit 60 participants via Facebook. I intend to recruit students 'face to face' at Parkgate Road Campus, at the University of Chester. I will use a script (please see Appendix A) to approach potential participants, and if they wish to participate, hand them a paper copy of the study, along with a plain white envelope to ensure anonymity and confidentiality. Additionally, I will request potential participant's hand their unidentifiable white plain envelope in at the Psychology Departments office on the ground floor in the Critchley Building. 2. I intend to utilize analysis of variants and potentially correlation and/or multiple regression for analysis. 3. I have addressed this comment on the information sheet, by correcting the typo and ensuring the help line details for both the The National Autistic Helpline, and Student Support Centre at the University of Chester are available (Please see Appendix B). 4. I have addressed this comment by not adding the Chair of the Ethics committee's details to the information and debrief sheets. 5. I have addressed this comment and my supervisor has piloted the study, and the information sheet now reflects the approximate completion time of the study (Please see Appendix B). 6. I have addressed this comment by ensuring the information and debrief sheet identify that data will be kept indefinitely by my supervisor confidentially and securely (Please see Appendix B & C).
2. ☐ I have submitted an application for ethical approval to the Department of Psychology Ethics Committee that was approved on [Click here to enter a date.](#)  
I wish the committee to consider the following amendments I would like to make to the research plan (attach the original approved application form) [Click here to enter text.](#)

<input type="checkbox"/> I am a member of staff. Signed: _____ Date: <a href="#">Click here to enter a date.</a>
Print the amendment form on BLUE PAPER and submit to the Dept. Office
<input checked="" type="checkbox"/> I am an UG/PGT/PGR student. I have discussed any amendments with my project supervisor. Print the amendment form on BLUE PAPER and submit to the Dept. Office
Signed: <u>Elizabeth Taylor</u> (Lead Applicant) Date: <u>26.4.17</u> <a href="#">Click here to enter a date.</a>
Supervisor comments: I have discussed the recommendations of the committee with the applicant and I am satisfied they have met the stated requirements. <del>I support the amendments to the research plan.</del> (delete as appropriate)
<input checked="" type="checkbox"/> Yes Sign and date the form <input type="checkbox"/> No Comments: <a href="#">Click here to enter text.</a>

Dopec  
ETMM020517

Signed:  (Supervisor) Date: 26.04.17 Click here to enter a date.

**COMMITTEE COMMENTS:**

☒ **ACCEPTABLE:** You may now commence with data collection subject to approval from any relevant external agencies.

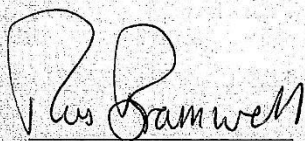
Please note that admin team can't be responsible for collecting your questionnaires. You should create a postbox (photo-copy paper boxes make good ones) which can be left by the counter of the Psych Admin office - or you may find it works better to have a postbox near where you give the questionnaires out. Amend instructions accordingly + get supervisor to check.

**DATA COLLECTION IS NOT PERMISSABLE UNDER THESE CONDITIONS**

☐ **ACCEPTABLE SUBJECT TO SUBMISSION OF FURTHER AMENDMENT FORM.**

- ☐ Acceptable subject to conditions listed by chair. Discuss conditions highlighted with supervisor and submit ethics application amendment form direct to office.
- ☐ Acceptable subject to conditions listed by chair: Submit ethics application amendment form direct to office.

Signed:

 P. Samwell

Date: Click here to enter a date.

28/4/17.

**Appendix A.****Statement of participant recruitment for 'face to face' recruitment**

"Hi,

How are you?

Please could I take a minute of your time to talk to you about a study I am currently running?  
Thank you.

I am currently completing my Msc. Family & Child Psychology, here at Parkgate Road Campus, at the University of Chester.

I am currently starting my dissertation, which aims to investigate the public's perceptions of vulnerable witnesses, specifically children with autism spectrum condition.

I would really appreciate it if I could give you a paper copy of the study, for you to complete in your own time. The study should take you no longer than approximately 30 to 45 minutes.

The study is completely confidential, and if you choose to take part I will provide you with an unidentifiable plain white envelope for you to put your study in, which can be handed in at the Department of Psychology office on the ground floor entrance of the Critchley Building, here at Parkgate Campus.

I would be grateful for your support, & it has been lovely talking to you today.

Thank you kindly,

Liz Taylor"



**Appendix B.****Public Perception of Witnesses with Autism Spectrum Condition****PARTICIPANT INFORMATION SHEET**

*I would like to invite you to participate in an online research study as part of my Dissertation for my Msc. Family and Child Psychology degree, at the University of Chester. Please read this participant information sheet before deciding whether you would like to participate in the study or not. It is important that you understand why I am carrying out the research and what it is comprised of. Please could I ask that you take your time to read the information carefully and ensure you feel you have understood and have enough information to make your decision whether you wish you proceed. If you require any more information, please contact me using the details below. Please be advised that you do not have to take part in this research if you do not want to.*

*Thank you for your time.*

**What is the purpose of the study?**

This is an academic study investigating the public's perceptions of vulnerable witnesses, specifically children with autism. The purpose is to obtain information on how vulnerable witnesses are viewed by individuals who have the potential to be jurors themselves within the criminal justice system. The data, which will remain anonymous, will be analysed to provide further understanding of how vulnerable witnesses may be perceived by potential jurors.

**Why have I been chosen to take part?**

You have been chosen to take part in this study as you are over the age of 18.

**What do I have to do?**

You will be asked initially to complete a questionnaire that comprises of 26 statements, requiring you to determine how likely you agree or disagree, utilising the Likert scale provided. On completion of this stage, you will then be asked to read four short interview transcripts. The transcripts are the recall of events from children (some of whom will have autism). The transcripts are based on a non-violent shop theft video that the children watched. After reading each transcript, you will be asked to respond 16 statements, advising how credible you consider the witness to be. You will need to decide whether you agree or disagree with the statements using the Likert scale provided.

You are not obliged to answer all the questions, however questionnaires that are partially completed may still be used for data analyses.

It should take you no longer than 30 to 45 minutes to complete this study.

**Who is conducting the study?**

I will be analysing the data which will contribute to my dissertation and may be used for publication in a journal thereafter. If you have any questions, problems or complaints regarding the study please contact myself (Elizabeth Taylor) [1612054@chester.ac.uk](mailto:1612054@chester.ac.uk), or my Research Dissertation Supervisor, Dr Michelle Mattison, [m.mattison@chester.ac.uk](mailto:m.mattison@chester.ac.uk).

**Is participation voluntary?**

Your participation in this study is entirely voluntary. You do not have to take part, and can choose to withdraw from the study at any point whilst completing it by closing down your browser, without giving any reason.

Please be aware that your responses may be analysed if you withdraw from the study partway through. Please be advised once you have completed and submitted your answers to the questionnaire, you will not be able to request your answers be withdrawn as they will be automatically anonymised and unidentifiable alongside other participants responses.

What are the risks/benefits of taking part in the study?

You will not be exposed to any direct harmful effects by participating within this study. However if you find you have been affected by participating in the study due to having autism spectrum condition or due to knowing someone with autism spectrum condition, please contact the below helpline for further information, guidance and support.

*The National Autistic Helpline:* 0808 800 4104

Monday-Thursday: 10.00 to 16.00, Friday: 09.00 to 15.00

If you are a student at the University of Chester, further guidance and support may also be sought from the Student Support Centre.

Email: [student.support@chester.ac.uk](mailto:student.support@chester.ac.uk)

Tel: 01244 511550

Please be advised that there are no right or wrong answers to the statements within this study, and your views and opinions will not be used to identify you.

The benefits of this study is that you will enable me to carry out the identified research, and in turn provide me with data to analyse for the purposes of my dissertation and potential publication. Though there will be no direct benefits to yourself for completing this study, if you are a student at the University of Chester, you will receive two RPS credits.

What about confidentiality?

All information with this study is strictly confidential and will only be used for the purposes of academic assessment. All your answers will be completely anonymous and will be stored securely. If you wish to reduce the risk of individuals around you seeing your answers, ensure you exit the browser appropriately after submitting your answers.

Data will be stored according to the Data Protection Act and the University Research Policies. Once analysis is completed, data will be kept in a password protected file and will be kept indefinitely by my supervisor confidentially and securely.

What about the results?

The results from this study will be used for academic assessment purposes, in completion of my Research Dissertation. Additionally the results of this study may be used for publication within a journal. Participants will not be able to be identified within any part of my Research Dissertation or if the research is published, as all answers will be anonymised once pooled. Due to all data being anonymous, individual feedback will not be available.

What if I am unhappy or if there is a problem?

If you find yourself unhappy with this study or believe there is a problem, please contact my Supervisor, Dr Michelle Mattison, [m.mattison@chester.ac.uk](mailto:m.mattison@chester.ac.uk).

Ethical Approval

Ethical approval for the study has been sought and obtained from The Department of Psychology Ethics Committee.

**If you would like to take part, please read and confirm that you agree with the following statements:**

- I am over the age of 18 years old
- I understand what my participation involves

- I understand that my participation is entirely voluntary and that I can withdraw at any time

**Please be aware by clicking 'next' you have consented to take part in this study. If you have read the information and you do not wish to take part, please exit the browser.**

**Appendix C.****Debrief Sheet**

Thank you very much for taking part in this study, your time is greatly appreciated. This study was conducted by Elizabeth Taylor and supervised by Dr Michelle Mattison.

This was an academic study investigating the public's perceptions of vulnerable witnesses, specifically children with autism, as witnesses within a criminal justice context. The purpose was to obtain information on how vulnerable witnesses would be viewed by individuals, who have the potential to be jurors themselves within the criminal justice system.

This study aims to identify and assist in the eradication of social prejudices that may be held by individuals who have the potential to be jurors, towards vulnerable witnesses, specifically children with autism.

The data will remain anonymous, and will be analysed to provide further understanding of how vulnerable witnesses may be perceived by potential jurors, therefore we will be unable to provide individual feedback on none of the questionnaires. All results will remain anonymous and will not be singled out at any point.

As per the Data Protection Act and the University of Chester's Research policies, data will be kept in a password protected file and will be kept indefinitely by my supervisor confidentially and securely.

If you find you have been affected by participating in this study due to knowing someone with autism, please contact the below helpline for further information, guidance and support.

The National Autistic Helpline: 0808 800 4104

Monday-Thursday: 10.00 to 16.00, Friday: 09.00 to 15.00

If you are a student at the University of Chester, further guidance and support may also be sought from the Student Support Centre.

Email: [student.support@chester.ac.uk](mailto:student.support@chester.ac.uk)

Tel: 01244 511550

**Please be advised that there are no right or wrong answers to the statements within this study, and your views and opinions will not be used to identify you.**

If you have any questions, problems or complaints regarding this study please contact myself; [1612054@chester.ac.uk](mailto:1612054@chester.ac.uk), or my Research Dissertation Supervisor, Dr Michelle Mattison, [m.mattison@chester.ac.uk](mailto:m.mattison@chester.ac.uk).

**Thank you for your time and support in completing this study**